Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PLAN (PACKAGE)

Group 6 CLOSURE PROJECT

(Buildings 280, S281, 281, 282, 284 Tank Pad, and T900D)

REVISION 0

May 4, 2001

Prepared by: _____ **Date:** 5/4/01
Andre Gonzalez, Industrial Hygiene

Prepared by: _____ **Date:** 5/4/01
Greg Sollner, Environmental Compliance

Prepared by: _____ **Date:** 5/4/01
Shaun Knapp, Environmental Compliance

Reviewed by: _____ **Date:** 5/8/01
Steve Luker, Quality Assurance

Reviewed by: _____ **Date:** 5/8/01
Duane Parsons, Characterization Coordinator

Approved by: _____ **Date:** 5/9/01
Vern Guthrie, KH Closure Project Manager

CHEMICAL CHARACTERIZATION PACKAGE

BUILDING(s): Group 6 Cluster (280, S281, 281, 282, and 284 Tank Pad)

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
280 Area - All	8	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as floor tile & mastic, drywall & ceiling tile, and base cove will be sampled for asbestos.
T900D	7	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as floor tile & mastic, drywall & ceiling tile, and base cove will be sampled for asbestos.
Total Samples:	15	The exact sample numbers and locations cannot be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

BERYLLIUM		
Sample Location	**Number of Samples (smears)**	**Sample location and justification/rational**
280 Area - All	0	Based on the 280 Area Historical Site Assessment Report and Interview Checklists, there is adequate historical and process knowledge to conclude that beryllium was not used or stored in these buildings. Therefore, sample is not required.
T900D	5 – biased	There is no documented supporting data or process history that proves beryllium was not used or stored in this building. Therefore, five biased samples will be obtained.
Total Samples:	5	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
Group 6 Cluster, all locations	0	Lead sampling is not required in the Group 6 Cluster. The only potential for a lead hazard would be in the paint. All paint will remain a part of the infrastructure during demolition and/or disposal, and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
280 Area - all	0	Based on the 280 Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns, no hazardous activities resulting in a release of RCRA or CERCLA constituents occurred in these buildings, therefore sampling for RCRA/CERCLA constituents is not required. Note: These buildings contain components that may need to be managed as Regulated Waste during D&D activities including mercury thermostats, fluorescent light bulbs, circuit boards, and lead acid batteries. Care will need to be taken to ensure these wastes are managed properly.
280	0	Visual observation revealed two areas with small stains. Both stained areas are clearly in locations where vehicles have been parked just inside the vehicle access doors. Based upon the stain locations and the history of the facility, the stains are in all likelihood motor oil, and do not necessitate any samples.
T900D	0	According to historical documents, T900D was classified as a general use office facility and did not contain any hazardous chemicals greater than RQ quantities. Chemicals that may have been present for sample preservation would have likely been various types of acids which are commonly used for this purpose, and which would not present a historical RCRA hazard if spilled. Therefore, no sampling is necessary. All other indicated materials in the historical documents would have been office or janitorial type materials.
Total Samples:	0	

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PCBs*		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
280 Area - all locations	0	The 280 Area buildings were constructed in 1994 through 1997. 280 Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns of this area indicate PCB contamination in the structural debris is not probable. Therefore, no sampling is required. These buildings will be disposed of as PCB Bulk Product Waste or sold for re-use.
T900D	0	T900D Historical Site Assessment Report, Interview Checklists, and facility walkdowns of this building indicate no potential for PCB contamination; therefore no sampling is required. This building will be disposed of as PCB Bulk Product Waste or sold for re-use.
Total Samples:	0	Note: These buildings do contain materials that may need to be managed as Regulated Waste during D&D activities, such as light ballasts. Care will need to be taken to ensure these wastes are managed properly.

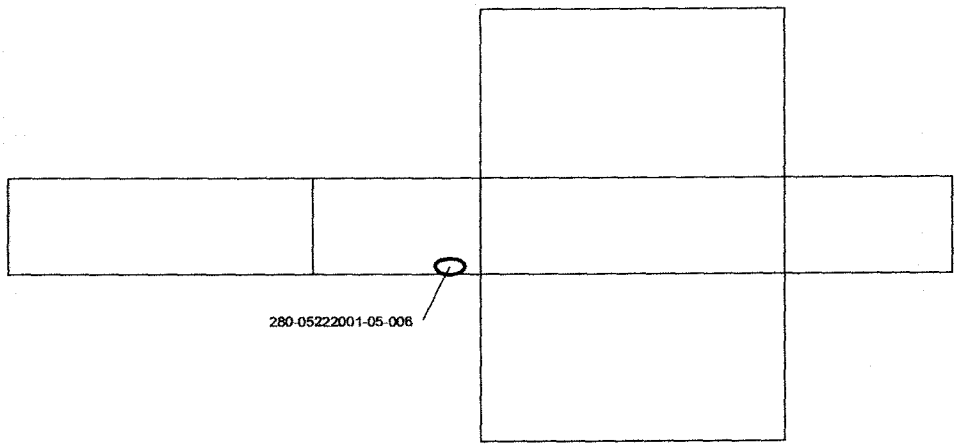
* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

PRE-DEMOLITION SURVEY

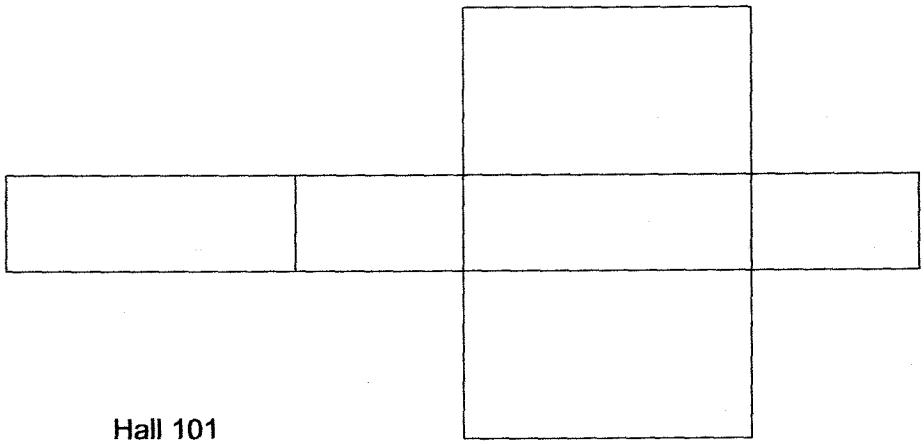
Survey Area: A **Survey Unit: GR6-A-001** **C** **Classification: N/A**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads

Bldg 280 Interior

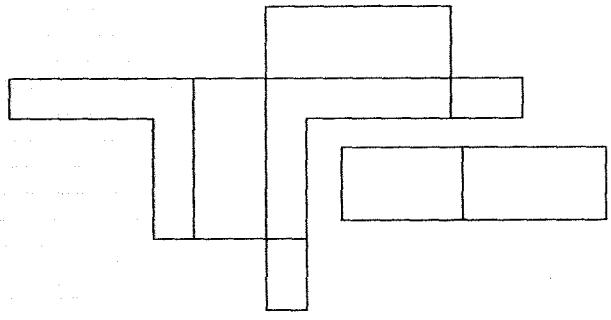
Room 108



Room 109



Hall 101



SURVEY MAP LEGEND

- (#) Asbestos Sample Location
- (#) Beryllium Sample Location
- [#] Lead Sample Location
- ◇ (#) RCRA/CERCLA Sample Location
- (#) PCBS Sample Location

■ Open/Inaccessible Area
□ Area in Another Survey Unit

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

MAP ID: fy2001/01-0507 April 25, 2001

DAP 1/31/01

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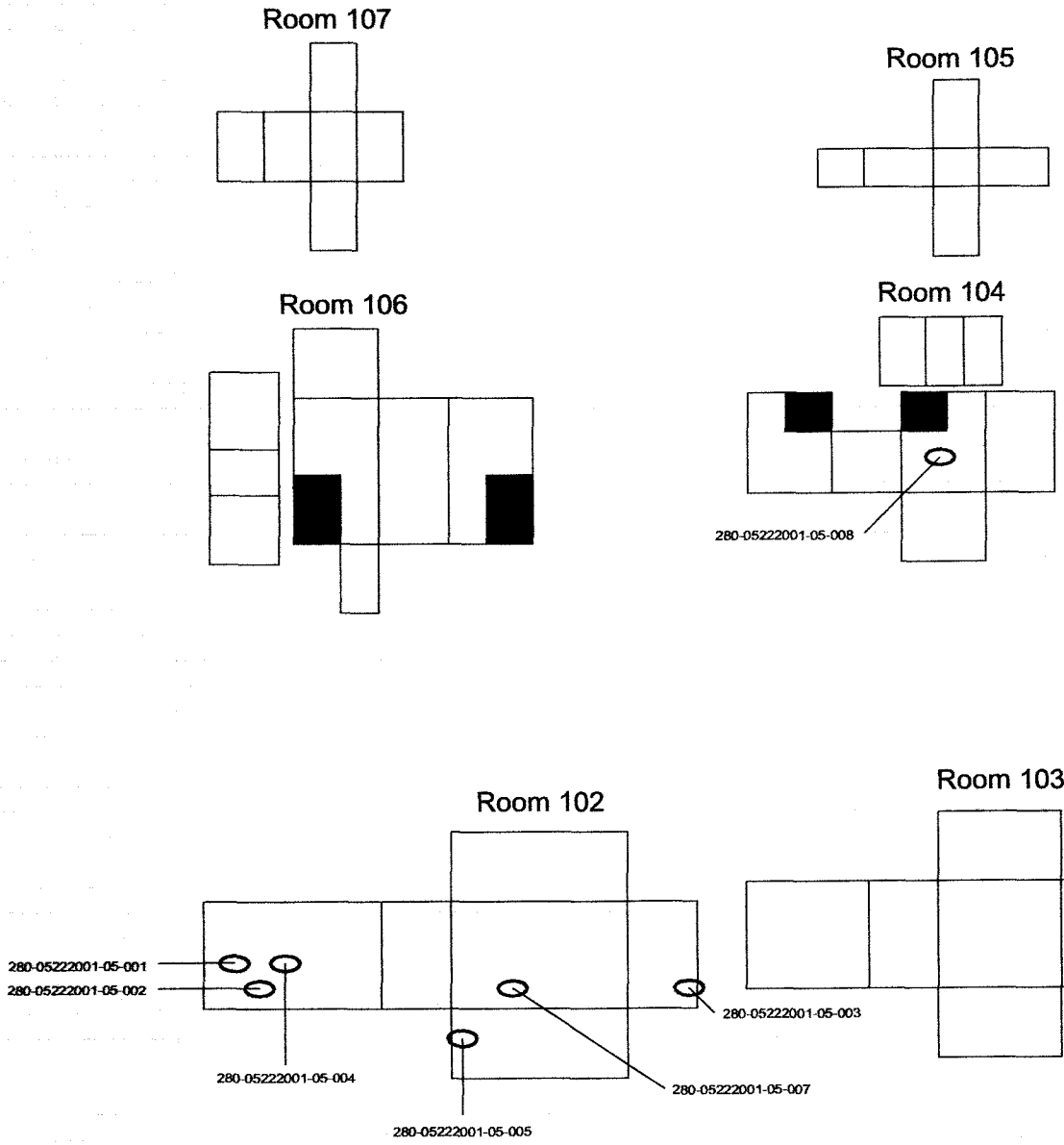
PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **C** **Classification: N/A**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads

Building 280



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
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0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

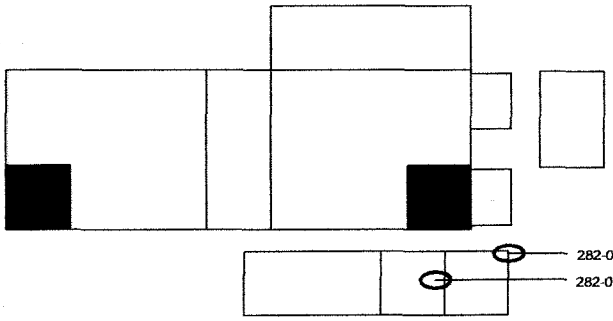
U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER-HILL
MAP ID: fy2001/01-9307 April 26, 2001

DAP 11/30/01

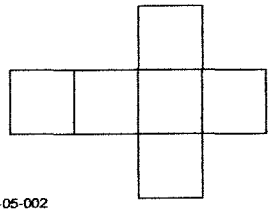
PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **C** **Classification: N/A**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads

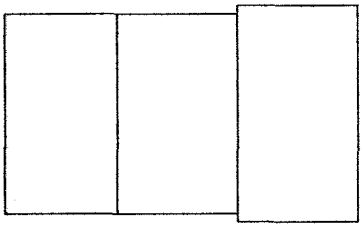
Building 282 Interior



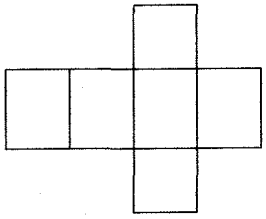
Room 113



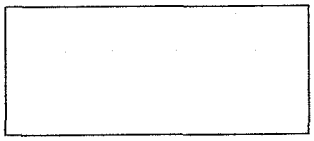
Building S281 Interior



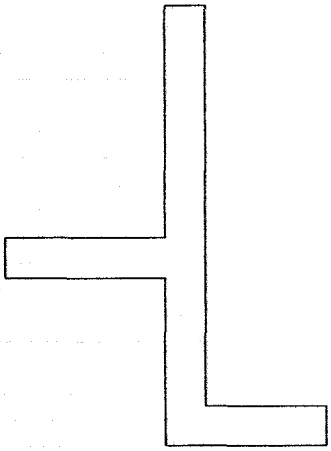
Building 281 Interior



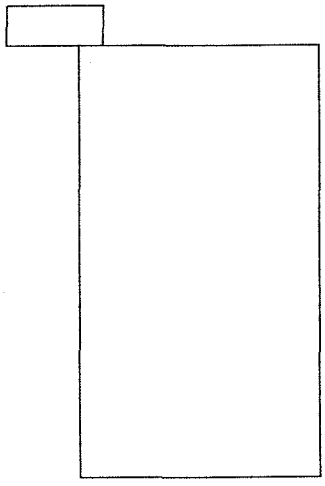
Bldg 280 North Pad



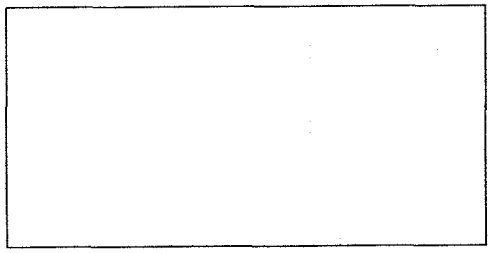
Bldg 280 West Walkway



Bldg 280 East Pad



Bldg 280 South Pad



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: 5Y2001/01-0507 April 26, 2001

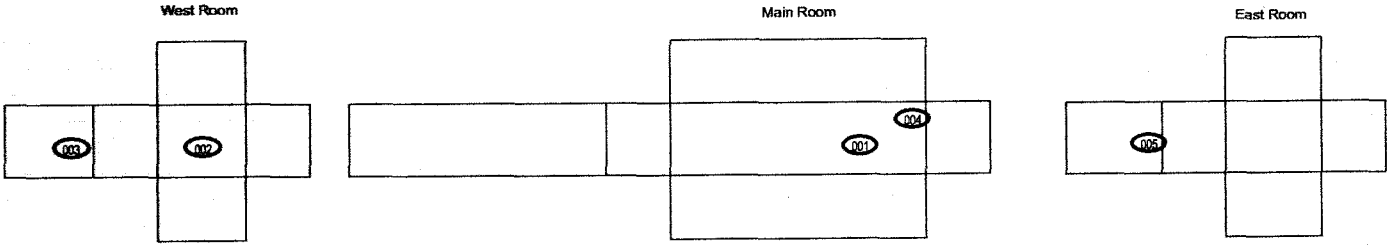
11/5/01

PRE-DEMOLITION SURVEY

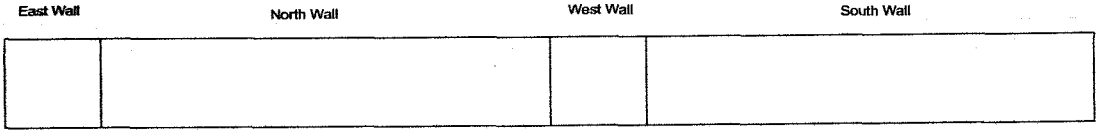
Survey Area: C **Survey Unit: GR6-C-003** **Classification: N/A**
Building: Group 6 (T900D)
Survey Unit Description: Interior & Exterior of T900D
Total Area: 415.2 sq. m. **Total Floor Area: 45.7 sq. m.**

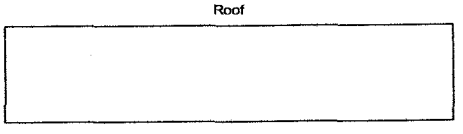
Building T900D
Interior

000 T900D-05222001-05-001 Thru 005



Building T900D
Exterior





SURVEY MAP LEGEND

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0 METERS 10
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U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

MAP ID: fy2001/01-0523 April 30, 2001

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896

TDH Licensed Laboratory # 30-0131

TABLE 1. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: RES 77475-1
Client: Kaiser-Hill
Client Project Number / P.O.: D1D0882, EFD90320
Client Project Description: T900D Bulk Asbestos
Date Samples Received: May 24, 2001
Analysis Type: PLM Short Report, Bulk
Turnaround: 3-5 Day

Kc
Data QA

Analyst: PFK

Client Sample Number	Lab ID Number	Layer	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
T900D-05222001-05001	EM 544398	A	White linoleum	100		ND	0	100
T900D-05222001-05002	EM 544399	A	White linoleum	100		ND	0	100
T900D-05222001-05003	EM 544400	A	White granular paint	5		ND	0	100
		B	White drywall	95		ND	15	85
T900D-05222001-05004	EM 544401	A	White granular paint	5		ND	0	100
		B	White drywall	95		ND	15	85
T900D-05222001-05005	EM 544402	A	White granular paint	10		ND	0	100
		B	White drywall	90		ND	15	85

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

KAISER HILL
COMPANY
ANALYTICAL SERVICES DIVISION

FAX COVER SHEET PRELIMINARY DATA REPORTS

RIN NUMBER: 01J0882, 883

FROM: **SHELLY JOHNSEN**

PHONE: **(303) 966-6401**

FAX: **(303) 966-8345**

TO: Andre Gonzales DAVE

FAX: 6678

PHONE: _____

NUMBER OF PAGES, INCLUDING COVER SHEET: _____

Please contact _____ if the fax is not received in its entirety.
(phone number)

If the accompanying data is stamped preliminary it is because the final data package has not been received and validated or verified. Until the data is validated or verified it must be considered preliminary. Final data is usually not received until 30 days after the laboratory has received the sample. Verification or validation is completed a short time following receipt of the final data package. You will be sent a copy of the verification or validation report, which you should review. If qualifiers have been attached to individual results they may affect the way that you use the data. If you have any question please contact your Analytical Services Project Lead, do not contact the laboratory directly.

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

0100882
~~IH02B006~~

Name of Originator: Andre Gonzales Title: IH&S Bldg/Ext: 116 / x4777 Date: 5/24/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk REMARKS	Lab Number
T900D-05222001-05-001	Asbestos				B	IH02B006	
T900D-05222001-05-002	↓				↓	↓	
T900D-05222001-05-003	↓				↓	↓	
T900D-05222001-05-004	↓				↓	↓	
T900D-05222001-05-005	↓				↓	↓	
						Pt. count all samples from trace to ≤3%.	

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	1415 5/24/01			

Report and Billing Instruction

Kaiser-Hill ☒	Verbal To:	A Gonzales	
RMRS ☐	Fax To:	6678	
SSOC ☐	Report To:	KH	
DynCorp ☐	Bill To:	KH	
WSI ☐	P.O.#/Release:	EF090320	
	Lab:	[illegible]	

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other______

Asbestos Samples: ☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other______

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Unable to verify content 0100882 [initials] 5/24/01

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

5/22/2021

T900S

Trailer with sheet-metal siding, fiberglass batt insulated, wood stud frame, and wood paneling on interior. Floor is vinyl (rubber) linoleum with no backing or adhesive. Sub-floor is construction grade plywood. Ceiling is drywall, no joint compound, with a white texture coating. Backboard is wood without adhesive, no marks. Roof was not accessible today.

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FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

ASBESTOS BULK SAMPLING FORM

CLIENT NAME: _____ LOCATION: T900D

SAMPLE DATE: 05/22/2001 SAMPLED BY: Devin Burgess PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
T900D-05222001-05-001	Lino	White linoleum w/ tan specs & 6"x6" squares	Main Room
T900D-05222001-05-002	Lino	" " " " " "	West Room
T900D-05222001-05-003	DRYWALL	White drywall ceiling w/ white skim texture	West Room
T900D-05222001-05-004	Drywall	" " " " " "	Main Room
T900D-05222001-05-005	Drywall	" " " " " "	East Room

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896
TDH Licensed Laboratory # 30-0134

TABLE I. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: RES 77474-1
Client: Kaiser-Hill
Client Project Number / P.O.: 01D0813, EKD90320
Client Project Description: B280 & B282 Bulk Asbestos
Date Samples Received: May 24, 2001
Analysis Type: PLM Short Report, Bulk
Turnaround: 3-5 Day

KC
Data QA

Analyst: RSW

Client Sample Number	Lab ID Number	Layer	Physical Description	Sub Part (%)	Asbestos Fibers		Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
280-05222001-05-001	EM 544388	A	Tan resinous material w/silver foil	100		ND	3	97
280-05222001-05-002	EM 544389	A	White & tan ceiling tile	100		ND	65	35
280-05222001-05-003	EM 544390	A	White mud w/beige paint	4		ND	TR	100
		B	Tan & pink drywall	96		ND	10	90
280-05222001-05-004	EM 544391	A	White & tan ceiling tile	100		ND	65	35
280-05222001-05-005	EM 544392	A	White plaster	2		ND	TR	100
		B	Tan & white fibrous material	3		ND	90	10
		C	Tan mastic	8		ND	0	100
		D	Gray cove base	87		ND	0	100
280-05222001-05-006	EM 544393	A	White mud w/gray paint	5		ND	TR	100
		B	Tan & pink drywall	95		ND	10	90
280-05222001-05-007	EM 544394	A	Yellow mastic	3		ND	TR	100
		B	Beige & multi-colored tile	97		ND	0	100

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896
TDH Licensed Laboratory # 30-0134

TABLE I. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: RES 77474-1
Client: Kaiser-Hill
Client Project Number / P.O.: 01D0883, EFD90320
Client Project Description: B280 & B282 Bulk Asbestos
Date Samples Received: May 24, 2001
Analysis Type: PLM Short Report, Bulk
Turnaround: 3-5 Day

Ke
Data QA

Analyst: RSW

Client Sample Number	Lab ID Number	Layer	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
280-05222001-05-008	EM 544395	A	Yellow mastic	4		ND	TR	100
		B	Beige & multi-colored tile	96		ND	TR	100
282-05222001-05-001	EM 544396	A	White tape	5		ND	95	5
		B	White mud w/gray paint	7		ND	TR	100
		C	Tan & pink drywall	88		ND	10	90
282-05222001-05-002	EM 544397	A	White fibrous material	1		ND	90	10
		B	Tan mastic	5		ND	0	100
		C	Gray cove base	94		ND	0	100

ND = None Detected
TR = Trace, <1% Visual Estimate

Trem-Act = Tremolite-Actinolite

NVLAP LAB NO. 101896
AIHA LAB I.D. 101533

ASBESTOS-TEM, PCM, PLM, SEM
METALS - AA, FLAME/FURNACE
AIRBORNE PARTICLES
SPECIAL PARTICLE ANALYSIS

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

Fax Transmittal

RES Job: 77475

To: Chuck Hoelzel

Company: Daise-Hill

Fax Number: 303 966 8345, 3578, 7991

From: Darral Colbert

Date: 5-29-01

Number of Pages: 1 (excluding cover sheet)

Message:

Please call (303) 830-1986 or 866 RESIENV if transmission is incomplete.

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NVLAP LAB NO. 101896
AIHA LAB I.D. 101533

ASBESTOS-TEM, PCM, PLM, SEM
METALS - AA, FLAME/FURNACE
AIRBORNE PARTICLES
SPECIAL PARTICLE ANALYSIS

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

Fax Transmittal

RES Job: 77474

To: Chuck Hoelzel

Company: Dalsea - Hill

Fax Number: 303-966-8345, 3598, 7991

From: Daniel Colbert

Date: 5-29-01

Number of Pages: 2 (excluding cover sheet)

Message:

Please call (303) 830-1986 or 866 RESIENV if transmission is incomplete.

FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

ASBESTOS BULK SAMPLING FORM

CLIENT NAME: _____ LOCATION: 280

SAMPLE DATE: _____ SAMPLED BY: _____ PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
280-05222001-05-001	misc.	duct tap w/ white compound. silver reflective type	Room 102
280-05222001-05-002	C.T.	2x4 white speckle	Room 102
280-05222001-05-003	drywall	drywall & tape joint compound	Room 102
280-05222001-05-004	C.T.	2x4 white speckle	Room 102
280-05222001-05-005	baseboard	gray baseboard w/ brown mastic	Room 102
280-05222001-05-006	drywall	drywall & tape joint compound	Room 108
280-05222001-05-007	F.T.	12x12 white w/ turquoise specks w/ yellow mastic	Room 102
280-05222001-05-008	F.T.	" " " " " " " " "	Room 104
282-05222001-05-001	drywall	drywall & t.j.c.	main Room
282-05222001-05-002	baseboard	gray baseboard	

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RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0883

Name of Originator: A. Gonzales Title: IH & S Bldg/Ext: 116/x6777 Date: 5/24/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk REMARKS	Lab Number
280-05222001-05-001	Asbestos				B	IH02B006	
280-05222001-05-002	↓				↓	↓	
280-05222001-05-003							
280-05222001-05-004							
280-05222001-05-005							
280-05222001-05-006							
280-05222001-05-007							
280-05222001-05-008							
282-05222001-05-001							
282-05222001-05-002							
						Pt. count all samples from trace to ≤ 3%	

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	Dyncorp	1415 5/24/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☑ Verbal To: A. Gonzales
- RMRS ☐ Fax To: 6678
- SSOC ☐ Report To: KH
- DynCorp ☐ Bill To: KH
- WSI ☐ P.O.#/Release: FF090320
- Lab: [illegible]

Analysis Request

Industrial Hygiene Sample: ☐ Standard Service ☐ Rush ☐ Other____

Asbestos Samples: ☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other____

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments: Unable to verify contents 01D0553 [initials] 5/24/01

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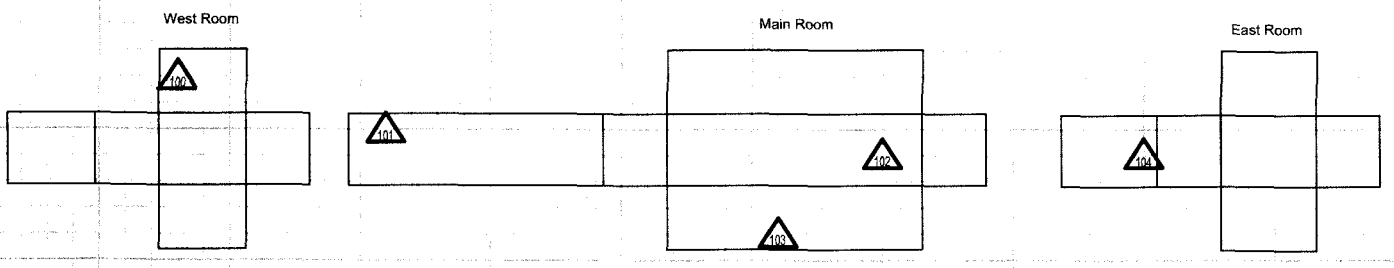
White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

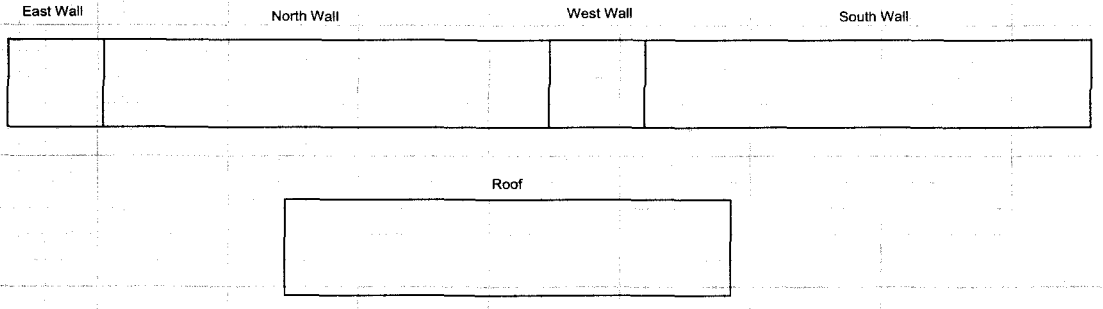
PRE-DEMOLITION SURVEY

Survey Area: C **Survey Unit: N/A** **Classification: N/A**
Building: Group 6 (T900D)
Survey Unit Description: Interior & Exterior of T900D
Total Area: 415.2 sq. m. **Total Floor Area: 45.7 sq. m.**

Building T900D
Interior

T900D-05302001-05-100 Thru 104





SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

Open/Inaccessible Area
Area in Another Survey Unit

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

MAP ID: fy2001/01-0523 April 30, 2001

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Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Sample Prefix: T900D 5302001 5
Bldg. - Date - IH#
Example: 865-09022000-310

RIN #: 01D0892

IWCP#: NA

Sampler (print): DAVID BABBS
Employee #: [redacted]
Signature: David Babbs

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm2)
100 1	West Room	NA	Horizontal surface of shelf, NW corner	100 cm^2
101 2	Main Room	NA	Side of ceiling-light fixture, NW corner	100 cm^2
102 3	Main Room	NA	Floor in front of SE entry door	100 cm^2
103 4	Main Room	NA	Top edge of ink board, south wall	100 cm^2
104 5	East Room	NA	Side of ceiling-light fixture, east side	100 cm^2

Checked By (print/sign): _____ Empl.#:_____ Date: _____

Shaded area = 100cm2

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0812
RIN#

Name of Originator: David Bass Title: IHES Bldg/Ext: T111A/1117 Date: 5-30-01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
T900D-05302001-05-100	Be	NA	NA	NA	B (circled)	Bulk (circled)	NR01A001	
T900D-05302001-05-101	↓	↓	↓	↓	↓		↓	
T900D-05302001-05-102	↓	↓	↓	↓	↓		↓	
T900D-05302001-05-103	↓	↓	↓	↓	↓		↓	
T900D-05302001-05-104	↓	↓	↓	↓	↓		↓	

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
David Bass	C Brown	941 5-31-01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☒
- RMRS ☐
- SSOC ☐
- DynCorp ☐
- WSI ☐

Verbal To: David Bass
Fax To: 6678
Report To: KH
Bill To: KH
P.O.#/Release: SFD 43120
Lab:

Analysis Request

Industrial Hygiene Sample: ☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:
Comments: Unable to verify contents for Rin 01D0592 [illegible] 5/31/01

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White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Johns Manville

Johns Manville Corporation
10100 West Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
Tel: (303) 978-3724

COVER PAGE

June 04, 2001

Shelly Johnsen
Rocky Flats Environmental Technology Site
P.O. Box 464, Bldg. 881
Golden, CO 80402-0464

Laboratory Report ID: 01060109
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0892
Requestor: David Babbs
P.O./Charge Code: EFD73420

Dear Ms. Johnsen:

The Johns Manville Industrial Hygiene Laboratory has performed the following analytical testing services as requested. The results were calculated based upon the information supplied on the submission form. All laboratory data have been filed and are available upon request. The Johns Manville Laboratory is accredited by the American Industrial Hygiene association (AIHA) in the industrial hygiene program (Certificate #056), and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the RFETS specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Sincerely,

Marilyn Andrews
Manager of Analytical Services
June 04, 2001

June 04, 2001

Laboratory Report ID: 01060109
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0892
Requestor: David Babbs
P.O./Charge Code: EFD73420

Scope of Work:

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
01D0892-001.001	T900D0530200105100	01060109-001	NR01A001	WIPE	QU010601-H
01D0892-002.001	T900D0530200105101	01060109-002	NR01A001	WIPE	QU010601-H
01D0892-003.001	T900D0530200105102	01060109-003	NR01A001	WIPE	QU010601-H
01D0892-004.001	T900D0530200105103	01060109-004	NR01A001	WIPE	QU010601-H
01D0892-005.001	T900D0530200105104	01060109-005	NR01A001	WIPE	QU010601-H

Commodore Advanced Sciences, Inc. RFETS	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 01060109 Due: 6/8/01	C.O.C. # 01D0892#001
		Page 1 of 1

Sampler(s) DAVID BABBS (time/date)	**Contact/Requester** JOHNSEN, SHELLY	**Telephone No.** 6401
RIN 01D0892	**Sampling Origin** T900D	**Purchase Order/Charge Code** EFD73420
Project Title T900D BE SMEARS	**Logbook No.** N/A	**Ice Chest No.** N/A **Temp.**
To (Lab) Johns Manville	**Method of Shipment** FEDERAL EXPRESS	**Bill of Lading/Air Bill No.** 4533-2127- 4454
Protocol	**Related COC (if any)**	**PRE** 010530-00116-001

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES or NO
Are other known hazardous substances present? YES or NO
** ** **

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS **Hold Time**

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
01D0892-001.001	T900D053020010 5100	FILTER	05/30/ 2001	7:00 AM	T900D	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [5dS]	N/A None
01D0892-002.001	T900D053020010 5101	FILTER	05/30/ 2001	7:00 AM	T900D	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [5dS]	N/A None
01D0892-003.001	T900D053020010 5102	FILTER	05/30/ 2001	7:00 AM	T900D	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [5dS]	N/A None
01D0892-004.001	T900D053020010 5103	FILTER	05/30/ 2001	7:00 AM	T900D	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [5dS]	N/A None
01D0892-005.001	T900D053020010 5104	FILTER	05/30/ 2001	7:00 AM	T900D	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [5dS]	N/A None
						CB 5-31-01		

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
R. Miller	5-31-01 1500	Fed Ex		Fed-ex		D. Slate	6/1/01 10:30
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)			Disposed By		Date/Time	

2L

NARRATIVE

The laboratory did not encounter any problems or questions associated with the receipt of samples into the laboratory. All samples identified on the Chain-of-Custody (COC) form were received and accepted in good condition with tamper-resistant seals intact. (1.d, 4.b, 4.e)

Whatman 4 or Whatman 41 swipe samples were submitted in this project and analyzed for the identification and quantitation of beryllium in accordance with Line Item Code (LIC), NR01A001. The methodology does not define any required specific holding times for the compound on the sampling media. Results of the sample analyses were generated and reported by the specified turn-around time (TAT). (4.f, 5.6, 5.f, 6.b.7)

The laboratory preparation of samples in this project was performed following laboratory Standard Operating Procedure (SOP), IH M-1.02, Revision N. Additional references to the preparation technique of this sample type are addressed in EPA Method, 3015A and CEM Application Procedure, MS-9. The samples were prepared using the CEM Microwave Sample Preparation System, Model MDS 2000. The instrumental sample analysis for these samples follows SOP, IH M-1.04, Revision N, which covers the analytical procedure outlined in OSHA method, ID-125G. Start-up and calibration of the Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) instrument are performed following manufacturer's instructions and are addressed in SOP, IH M-1.03, Revision N. (5.a)

Results of all calibration verifications (initial and continuing), method blanks (calibration and matrix), Laboratory Control Samples (LCSs), Laboratory Control Sample Duplicates (LCDs) and internal QA/QC program monitoring standards for this analytical batch are within acceptable limits as specified in Statement of Work (SOW) modules, GR01-B.3 and NR01-A. (5.c, 5.d.2, 5.d.3, 6.b.2-6)

The internal quality control procedures for statistical monitoring of analytical data to ensure the production of quality results with continuing high validity are addressed in the JMTC IH Laboratory Quality Assurance Manual, Section 10.0. Results of all method-specific QC assessments for this analytical batch are within acceptable limits in accordance with SOW modules, GR01-B.3 and NR01-A. (5.c, 6.b.1)

The Instrument Detection Limit (IDL) has been determined to be 0.00028 µg/ml using the ICP-AES instrument, Perkin Elmer - Optima model 3000DV. Method Detection Limit (MDL) determinations are performed in accordance with the EPA Method contained in 40 CFR Part 136, Appendix B. The MDL for beryllium on the Whatman swipe matrix by ICP-AES has been determined to be 0.012 µg/swipe. These values meet the required detection limits for SOW module, NR01-A. (5.d.1) The sample batch did not require any sample re-analyses due to dilutions or any anomalies. (5.d) The qualifiers used for the results page are "U" for non-detect and "J" for levels greater than the MDL, but less than the Reporting Limit.

The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate N. 056) and continues to rate proficient within the Proficiency Analytical Testing (PAT) program. This program is designed for laboratories involved in analyzing samples taken in the workplace environment. The JMTC IH Analytical Laboratory is also accredited in the Environmental Lead Laboratory Accreditation Program (ELLAP), which is recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP). This program accredits and monitors performance of laboratories testing for lead in environmental samples such as paint, soil, dust wipes and air. (5.a)

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June 04, 2001

Laboratory Report ID 01060109
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0892
Requestor: David Babbs
P.O./Charge Code: EFD73420

QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION			Q	Air Vol or Time	Air Concentration
				Back Section	Front Section	Total			
T900D0530200105100	01060109-001	Beryllium	0.1 µg			< 0.1 µg	U		
T900D0530200105101	01060109-002	Beryllium	0.1 µg			< 0.1 µg	U		
T900D0530200105102	01060109-003	Beryllium	0.1 µg			< 0.1 µg	U		
T900D0530200105103	01060109-004	Beryllium	0.1 µg			< 0.1 µg	U		
T900D0530200105104	01060109-005	Beryllium	0.1 µg			< 0.1 µg	U		

June 04, 2001

Laboratory Report ID 01060109
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0892
Requestor: David Babbs
P.O./Charge Code: EFD73420

QC RESULTS SUMMARY

QC Parameter	QC Item Type	Compound	Expected Recovery	Actual Recovery	Percent Recovery	QC Sample ID	Date Analyzed	Instrument Run
Preparation Blank	PB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		6/4/01	QU010601-H
Matrix Blank	MB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		6/4/01	QU010601-H
Matrix Blank Spike	MS1	Beryllium	5.0 µg	5.32 µg	106.4		6/4/01	QU010601-H
Laboratory Control Sample	LC1	Beryllium	9.0 µg	8.94 µg	99.3	QC01051834	6/4/01	QU010601-H
Laboratory Control Duplicate	LC1a	Beryllium	9.0 µg	8.97 µg	99.7	QC01051834	6/4/01	QU010601-H

☐ Property ☐ Waste ■ Sample

COPY

RELEASE EVALUATION FORM

Release Evaluation No. 010530-00116-001 **EXTENDED:** NO **EXPIRES:** N/A **Charge No.:** N/A

PART I **SENDER/CUSTODIAN ACKNOWLEDGEMENT**

Description of Property/Waste/Sample To Be Released/Transferred: Five (Qty. 5) Beryllium characterization swipe samples obtained for Be analysis in T900D. Sample #'s are as follows: T900D-05302001-05-100, T900D-05302001-05-101, T900D-05302001-05-102, T900D-05302001-05-103, T900D-05302001-05-104.

Current Location: Building 116

Destination: John Mansville Technical Center, PO Box 625005, Littleton, CO 80162-5005

New Recipient/Custodian: Same as above

History/Process Knowledge: Swipe samples came from the interior surfaces of T900D. Process knowledge and site documents indicate this facility has never been posted as a CA/RBA. The facility has served as an administrative area.

1) By signing below, I certify information provided in Part I of this release evaluation to be true and accurate.
2) By signing below, I agree to comply with the specific requirements noted in Part II of this release evaluation.

Sender/Custodian: David Babbs Emp. No: [redacted] Date: 5/31/01 Ext: 4717

PART II **RADIOLOGICAL ENGINEERING**

SPECIFIC REQUIREMENTS AND/OR COMMENTS:

The samples specified above have been reviewed by Radiological Engineering and process knowledge indicates that there are no radiological concerns. As a result, ***NO RADIOLOGICAL SURVEYS ARE REQUIRED*** *prior to transfer to the receiving laboratory.*

Custodian: Ensure only indicated samples are delivered to the new custodian for beryllium analysis. Notify appropriate personnel for coordination of sample acceptance by the appropriate custodian.

This is an unrestricted release.

Evaluated: Jay M. Britten / Jay M Britten Emp. No: [redacted] Date: 5/31/01 Ext: 3050
Radiological Engineer

APPROVAL FOR TRANSFER/SHIPMENT

Approved: Jay M. Britten / Jay M Britten Emp. No: [redacted] Date: 5/31/01 Ext: 3050
Radiological Engineer

PROPERTY/WASTE RELEASE EVALUATION SIGNATURE REQUIREMENTS

Release Evaluation #: 010530-00116-001 COPY

Release Evaluation for Waste:

A Release Evaluation for Waste requires an evaluation and unrestricted release approval signature. The evaluation signature is by the Radiological Engineer (RE) providing the methods or criteria for unrestricted release (i.e., survey requirements, analytical requirements, no survey required, etc.). The unrestricted release approval signature for a Release Evaluation for Waste shall be a RE authorized to provide unrestricted release approval. In addition, the evaluation and unrestricted release approval signatures shall not be the same RE. The intent of this provision is to provide peer review of the evaluation and method of unrestricted release. It is important the RE take the peer review process seriously and not become a "rubber stamp" for their fellow engineer.

Release Evaluation for Property:

A Release Evaluation for Property requires an evaluation and unrestricted release approval signature. For a Release Evaluation for Property, the evaluation and unrestricted release signature may be the same RE. In the past, only one signature was required for property for which a RE could provide an unrestricted release on the basis of process knowledge/history.

Release Evaluation for Samples:

Samples are any waste or material that is being shipped to an off-site facility for analysis. Samples that may be provided with an unrestricted release using process knowledge/history or standard contamination survey techniques may be authorized for shipment to an off-site facility using the signatory requirements specified for property. Samples which cannot be provided with an unrestricted release using process knowledge/history or standard contamination survey techniques shall be authorized for shipment from the Site using the methodology specified for waste, i.e., second signature being provided by a RE authorized to perform peer review and approval for shipment.

The approval for transfer/shipment section of a Sample Release Evaluation (SRE) shall be revised as noted below for samples which cannot be provide with an unrestricted release.

"The samples specified in Part 1 of this release evaluation are being provided with authorization for transport as non-radioactive materials in accordance with Department of Transportation (49 CFR) regulation. This authorization for shipment does not constitute an unrestricted release."

Additional Documentation:

Number of lines per section may be modified or additional pages attached to ensure adequate documentation of information necessary to perform release evaluation.

Additional pages or attachments to a release evaluation shall have the evaluation number, Page __ of __, initials of Radiological Engineer signing approval for transfer/shipment and date.

Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PACKAGE

400/500/~~900~~ BUILDING CLUSTER CLOSURE PROJECT

exp 2/26/01

REVISION 1

FEBRUARY 20, 2001

Prepared by: _____
Industrial Hygiene

Prepared by: _____
Environmental Compliance

Reviewed by: _____
Quality Assurance

Reviewed by: _____ 2/21/01
RISS Facility Characterization Coordinator

Approved by: _____
Closure Project Facility Manager

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CHEMICAL CHARACTERIZATION PACKAGE

BUILDING(s): 400/500/900 CLUSTER – (T551A, 442W, 442L, ~~T900D~~) DAP 2/26/01

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.

* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
442 L&W	37	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure
~~T900D~~	~~7~~	~~Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure.~~
T551A	20	Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure.
Total Samples:	64	The exact sample numbers and locations will not be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

Removed DAP 2/26/01

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BERYLLIUM		
Sample Location	**Number of Samples (Smears)**	**Sample location and justification/rational**
442 L&W	Room 101 – 15 random, 2 biased Room 105 – 36 random, 4 biased All other Facility areas 5 – biased	Process history indicates B442W, Rooms 101 and 105 may have been used as a beryllium storage areas, no documented supporting data or process history proves otherwise. Therefore, random and biased sampling will be performed in Rooms 101 and 105. Room 101 and 105 are approximately 1900 sq. ft, and 5400 sq. ft respectively. There is no documented supporting data or process history that proves beryllium was not used or stored in the remaining portions of B442 L&W. Therefore, two biased samples per building will be obtained in areas other than B442W, Rooms 101 and 105.
T551A	5 – biased	No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.
~~T900D~~	~~5 – biased~~	~~No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.~~
Total Samples:	72	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

Removed BHP 2/26/01

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
400, 500, ~~900~~ Cluster, all locations BHP 2/26/01	0	Lead sampling is not required in the 400, 500, 900 Cluster. All paint will remain a part of the infrastructure during demolition and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L & 442W	0	A walk-down of the building, review of building historical documents and conversations with personnel assigned to the building, with historical knowledge of the processes in the building, indicate that no major spills of concern occurred within the building. Dioctyl phthalate was used in the building in vacuum pumps, and while some material was probably dripped on the floor during the course of operations, it was in small quantities that were immediately cleaned up. The only incident that appears to have occurred at the building involved a spill of oil in the soil outside the building. It was remediated at the time of the spill, and turned out to be regular oil, not dioctyl phthalate, as suspected, therefore no sampling is required.
T551A	0	Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.

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~~T900D~~	0	~~Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.~~
Total Samples:	0	

Removed DHP 1/26/01

PCBs		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L, steam pump	4 (3 + duplicate)	There is visible staining on the concrete pad surrounding the steam pump from oil used to lubricate the pump (approximately 25 sqft). This oil could have been contained PCBs at one time. Core sampling (2" diameter, 2" depth) in the number indicated should be conducted to determine the presence or absence of PCBs. (Deeper samples will be taken in the unlikely event that contamination appears to have migrated farther than 2" into the slab.) Disposal of the entire slab as PCB bulk remediation waste would likely be more expensive, and would require soil sampling to determine any migration under the slab.
T551A	0	Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.
~~T900D~~	~~0~~	~~Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.~~
Total Samples:	4	

Removed DHP 2/26/01

* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

35

Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PACKAGE

400/500/900 BUILDING CLUSTER CLOSURE PROJECT

REVISION 0

FEBRUARY 1, 2001

Prepared by: _____
Industrial Hygiene

Prepared by: _____
Environmental Compliance

Reviewed by: _____
Quality Assurance

Reviewed by: _____ 2/1/01
RISS Facility Characterization Coordinator

Approved by: _____ FOR FRANK GIBBS FOR 400 AREA
Closure Project Facility Manager

Revised to Rev 1 MP 2/1/01

36

CHEMICAL CHARACTERIZATION PACKAGE

BUILDING(s): 400/500/900 CLUSTER – (T551A, 442W, 442L, T900D)

Note: This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
442 L&W	37	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure
T900D	7	Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure.
T551A	20	Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure.
Total Samples:	64	The exact sample numbers and locations will not be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

BERYLLIUM		
Sample Location	**Number of Samples (Smears)**	**Sample location and justification/rational**
442 L&W	Room 101 – 15 random, 2 biased Room 105 – 36 random, 4 biased All other Facility areas 5 – biased	Process history indicates B442W, Rooms 101 and 105 may have been used as a beryllium storage areas, no documented supporting data or process history proves otherwise. Therefore, random and biased sampling will be performed in Rooms 101 and 105. Room 101 and 105 are approximately 1900 sq. ft, and 5400 sq. ft respectively. There is no documented supporting data or process history that proves beryllium was not used or stored in the remaining portions of B442 L&W. Therefore, two biased samples per building will be obtained in areas other than B442W, Rooms 101 and 105.
T551A	5 – biased	No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.
T900D	5 – biased	No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.
Total Samples:	72	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

Revised to Rev 1 DOE 2/2/01

37

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
400, 500, 900 Cluster, all locations	0	Lead sampling is not required in the 400, 500, 900 Cluster. All paint will remain a part of the infrastructure during demolition and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L & 442W	0	A walk-down of the building, review of building historical documents and conversations with personnel assigned to the building, with historical knowledge of the processes in the building, indicate that no major spills of concern occurred within the building. Dioctyl phthalate was used in the building in vacuum pumps, and while some material was probably dripped on the floor during the course of operations, it was in small quantities that were immediately cleaned up. The only incident that appears to have occurred at the building involved a spill of oil in the soil outside the building. It was remediated at the time of the spill, and turned out to be regular oil, not dioctyl phthalate, as suspected, therefore no sampling is required.
T551A	0	Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.
T900D	0	Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.
Total Samples:	0	

PCBs		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L, steam pump	4 (3 + duplicate)	There is visible staining on the concrete pad surrounding the steam pump from oil used to lubricate the pump (approximately 25 sqft). This oil could have been contained PCBs at one time. Sampling as indicated should be conducted to determine the presence or absence of PCBs. Disposal of the entire slab as PCB bulk remediation waste would likely be more expensive, and would require soil sampling to determine any migration under the slab.
T551A	0	Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.
T900D	0	Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.
Total Samples:	4	

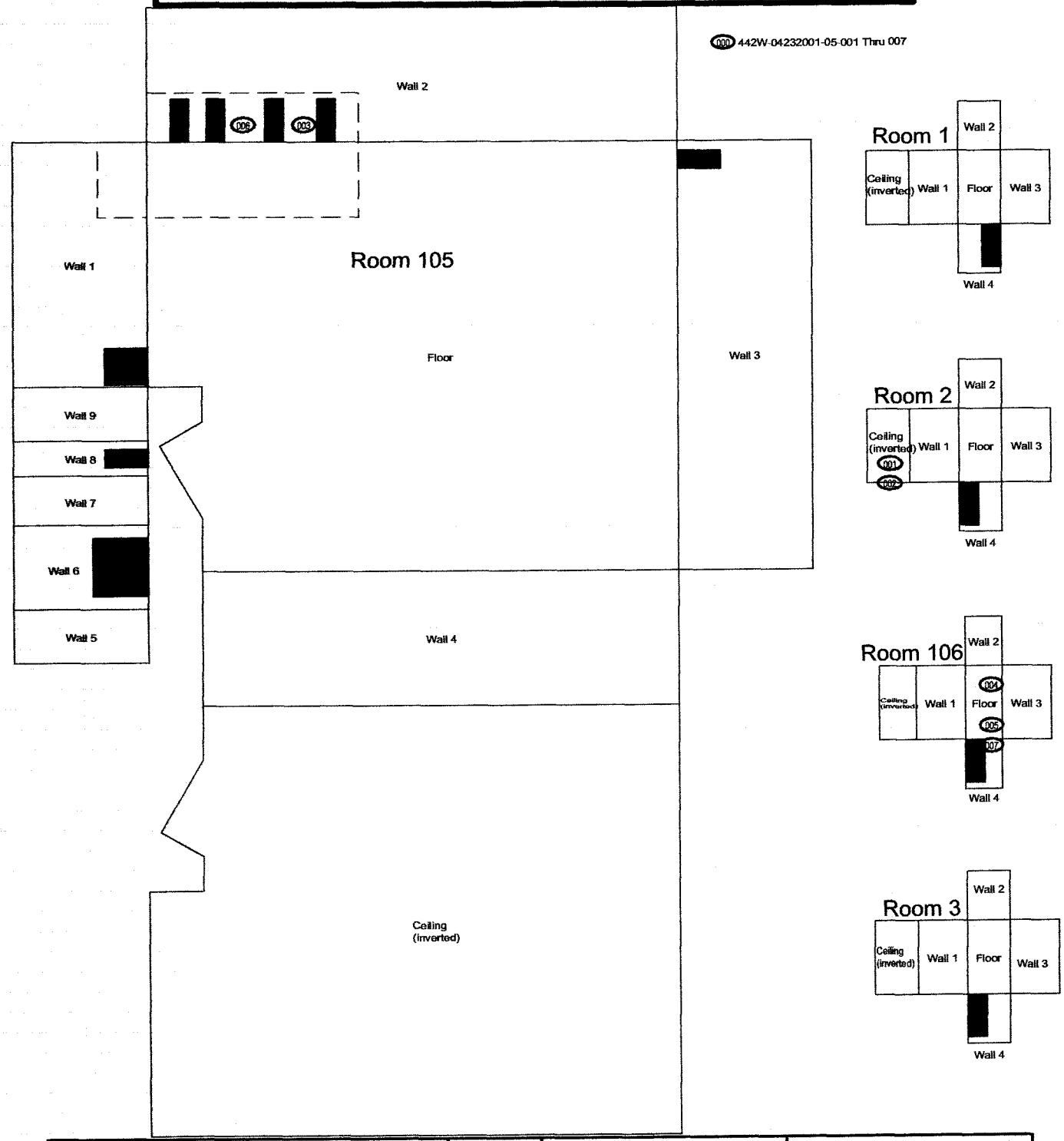
* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

Revised to Rev 1 DMP 2/7/01

38

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: 442-A-003** **Classification: N/A**
Building: 442W
Survey Unit Description: Interior of B442W



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0303
March 8, 2001

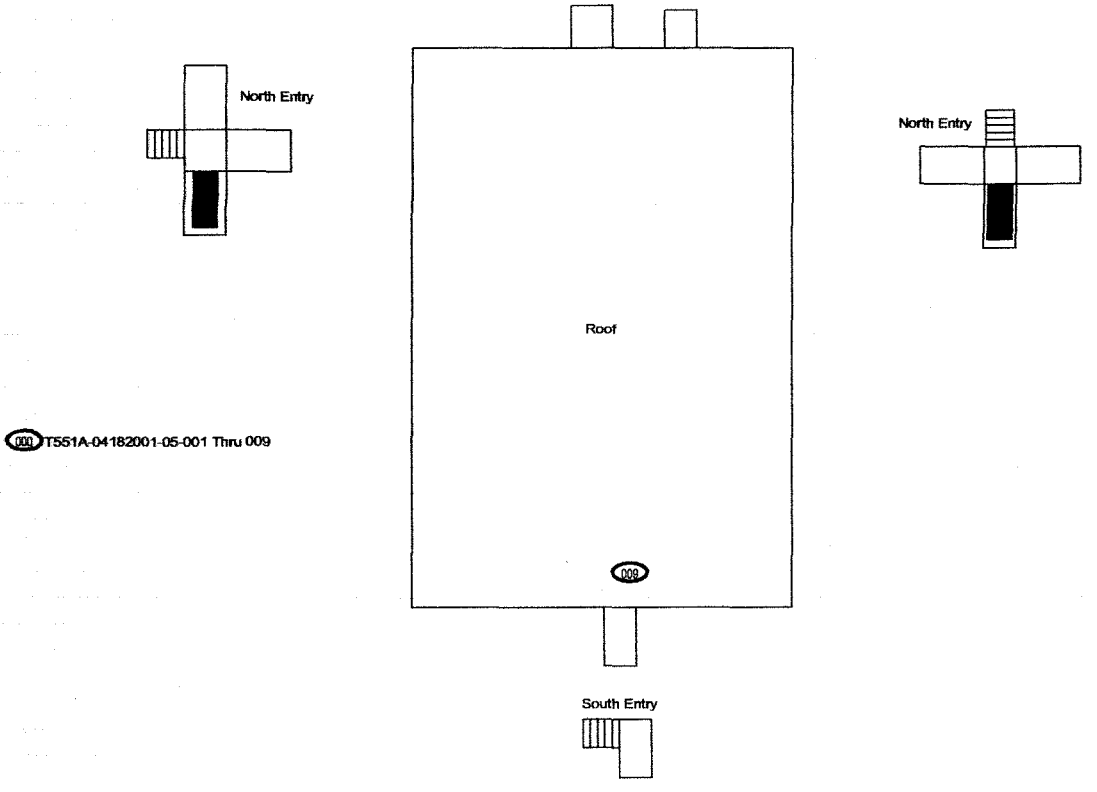
442-A-003

39

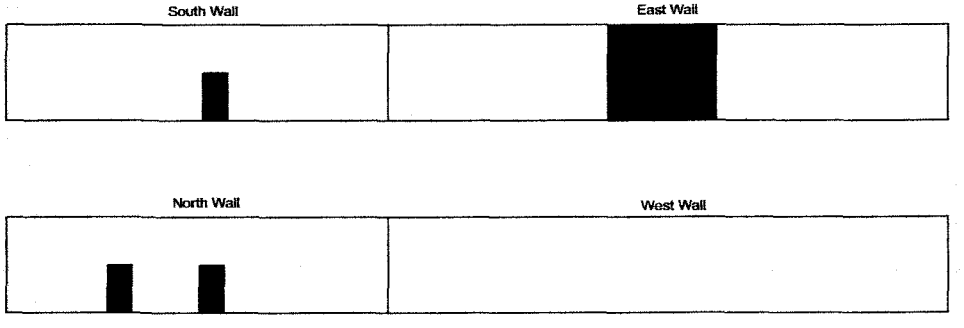
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: D **Survey Unit: 551-D-006** **Classification: N/A**
Building: Trailer 551A
Survey Unit Description: Exterior of T551A

Building T551A
Exterior



000 T551A-04182001-05-001 Thru 009



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

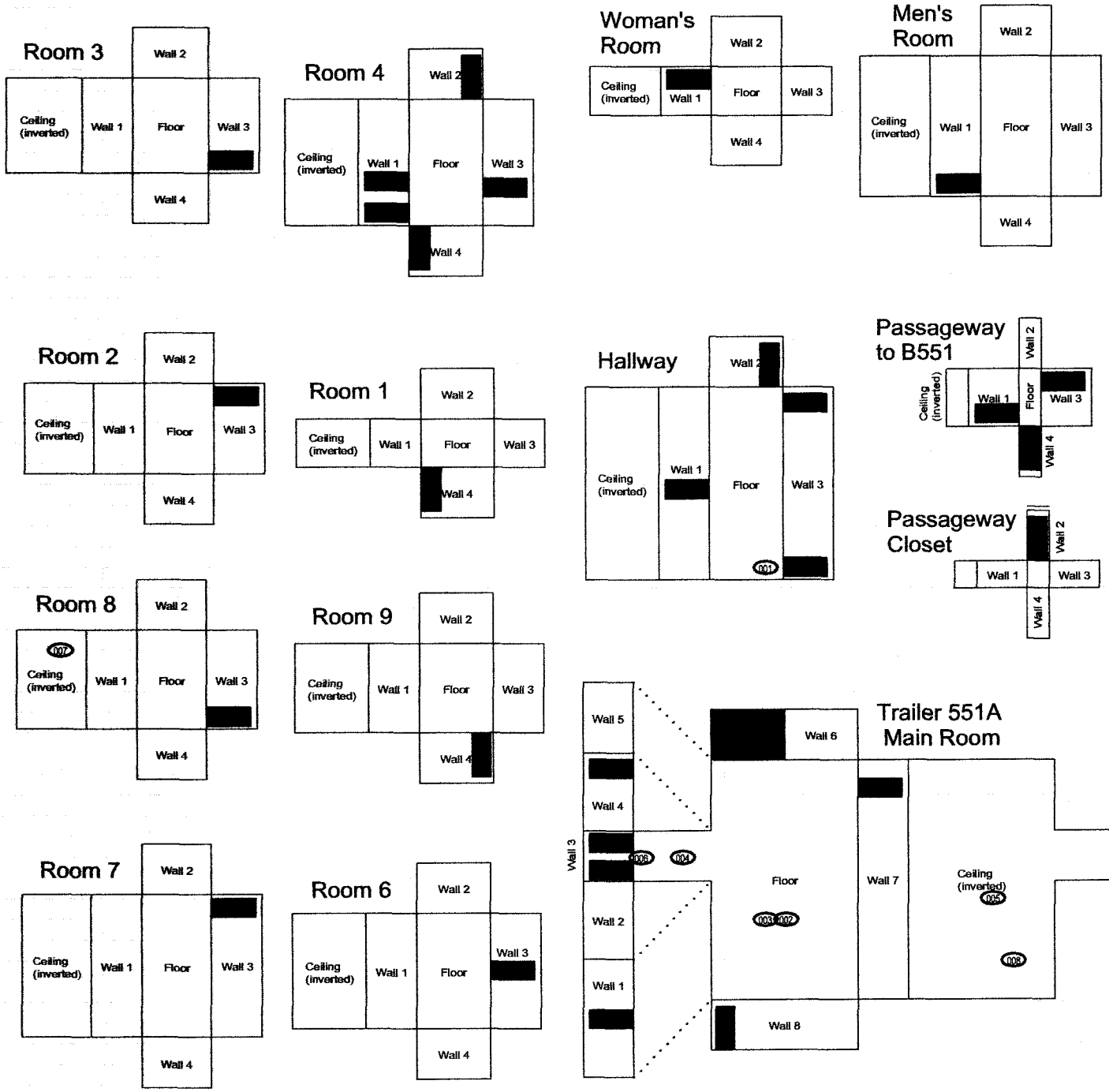
0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0303 March 6, 2001

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: C **Survey Unit: 551-C-005** **Classification: N/A**
Building: Trailer 551A
Survey Unit Description: Interior of T551A

T551A-04182001-05-001 Thru 009



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

MAP ID: fy2001/01-0303 March 6, 2001

551-C-005

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896
TDH Licensed Laboratory # 30-0136

TABLE L PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 76899-1R**
Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **01D0712/ EFDA1712**
Client Project Description: **On-site Sample Analysis, A. Gonzalez**
Date Samples Received: **May 1, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **24 Hour**

Analyst: TDL

Client Sample Number	Lab ID Number	Layer	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
T551A-04182001-05-001	EM 539877	A	Tan mastic	1		ND	0	100
		B	White/tan tile	99		ND	0	100
T551A-04182001-05-002	EM 539878	A	Tan mastic	5		ND	0	100
		B	White/tan tile	95		ND	0	100
T551A-04182001-05-003	EM 539879	A	Tan mastic	10		ND	0	100
		B	White tile	90		ND	0	100
T551A-04182001-05-004	EM 539880	A	White tile	100		ND	0	100
T551A-04182001-05-005	EM 539881	A	White/tan drywall	100		ND	20	80
T551A-04182001-05-006	EM 539882	A	White/tan drywall w/white granular paint	100		ND	10	90
T551A-04182001-05-007	EM 539883	A	White/tan drywall w/white granular paint	100		ND	10	90
T551A-04182001-05-008	EM 539884	A	Pink fibrous material	100		ND	93	7
T551A-04182001-05-009	EM 539885	A	Black tar	100		ND	15	85

ND = None Detected
TR = Trace, < 1% Visual Estimate

Tremo-Act = Tremolite-Actinolite

Date QA

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

OID 0712

Name of Originator: A. Gonzalez Title: IH&S Bldg/Ext: 116/x6727 Date: 4/24/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
T551A-04182001-05-001	Asbestos					IH02B005	Pt. count all samples trace to 1%	
T551A-04182001-05-002								
T551A-04182001-05-003								
T551A-04182001-05-004								
T551A-04182001-05-005								
T551A-04182001-05-006			Samples disposed of in 881 waste pool					
T551A-04182001-05-007								
T551A-04182001-05-008								
T551A-04182001-05-009								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	13:50 4-30-01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill	☒	Verbal To:	A. Gonzalez
RMRS	☐	Fax To:	KH
SSOC	☐	Report To:	KH
DynCorp	☐	Bill To:	KH
WSI	☐	P.O.#/Release:	EFDA1712
		Lab:	Rocky Mtn Lab

Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

OID 0712

Name of Originator: A. Gonzalez Title: IHS Bldg/Ext: 116/x6227 Date: 4/24/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area Bulk	REMARKS	Lab Number
TSSIA-041820O1-05-021	Asbestos					IH02B005	pt. count all samples time to 3%	
TSSIA-041820O1-05-022								
TSSIA-041820O1-05-023								
TSSIA-041820O1-05-024								
TSSIA-041820O1-05-025								
TSSIA-041820O1-05-026								
TSSIA-041820O1-05-027								
TSSIA-041820O1-05-028								
TSSIA-041820O1-05-029								

4/24/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
		13:50 4-30-01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill ☑ Verbal To: A. Gonzalez
RMRS ☐ Fax To: 6227
SSOC ☐ Report To: KH
DynCorp ☐ Bill To: KH
WSI ☐ P.O.#/Release: EFH1112
Lab:

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Analysis Request

Industrial Hygiene Sample

☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:
Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896
TDH Licensed Laboratory # 30-0136

TABLE I. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 76899-1**
Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **01D0712/ EFDA1712**
Client Project Description: **On-Site Sample Analysis, A. Gonzalez**
Date Samples Received: **May 1, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **24 Hour**

Analyst: PDL

Client Sample Number	Lab ID Number	Layer	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
T7551A-04182001-05-001	EM 539877	A	Tan mastic	1		ND	0	100
		B	White/tan tile	99		ND	0	100
T7551A-04182001-05-002	EM 539878	A	Tan mastic	5		ND	0	100
		B	White/tan tile	95		ND	0	100
T7551A-04182001-05-003	EM 539879	A	Tan mastic	10		ND	0	100
		B	White tile	90		ND	0	100
T7551A-04182001-05-004	EM 539880	A	White tile	100		ND	0	100
T7551A-04182001-05-005	EM 539881	A	White/tan drywall	100		ND	20	80
T7551A-04182001-05-006	EM 539882	A	White/tan drywall w/white granular paint	100		ND	10	90
T7551A-04182001-05-007	EM 539883	A	White/tan drywall w/white granular paint	100		ND	10	90
T7551A-04182001-05-008	EM 539884	A	Pink fibrous material	100		ND	93	7
T7551A-04182001-05-009	EM 539885	A	Black tar	100		ND	15	85

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

Data QA

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D 0712

Name of Originator: A. Gonzalez Title: IH+S Bldg/Ext: 116/x6727 Date: 4/24/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
T551A-04182001-05-001	Asbestos					IH02B005		
T551A-04182001-05-002							pt. count all samples true to 3%	
T551A-04182001-05-003								
T551A-04182001-05-004								
T551A-04182001-05-005								
T551A-04182001-05-006			Samples in 881	disposed of waste pool				
T551A-04182001-05-007								
T551A-04182001-05-008								
T551A-04182001-05-009								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	13:50 4-30-01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill ☒ Verbal To: A. Gonzalez
RMRS ☐ Fax To: 6679
SSOC ☐ Report To: KH
DynCorp ☐ Bill To: KH
WSI ☐ P.O.#/Release: EFDA1712
Lab: Rocky Flats

Analysis Request

Industrial Hygiene Sample
☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples
☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:
Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

ASBESTOS BULK SAMPLING FORM

CLIENT NAME: _____ LOCATION: _____

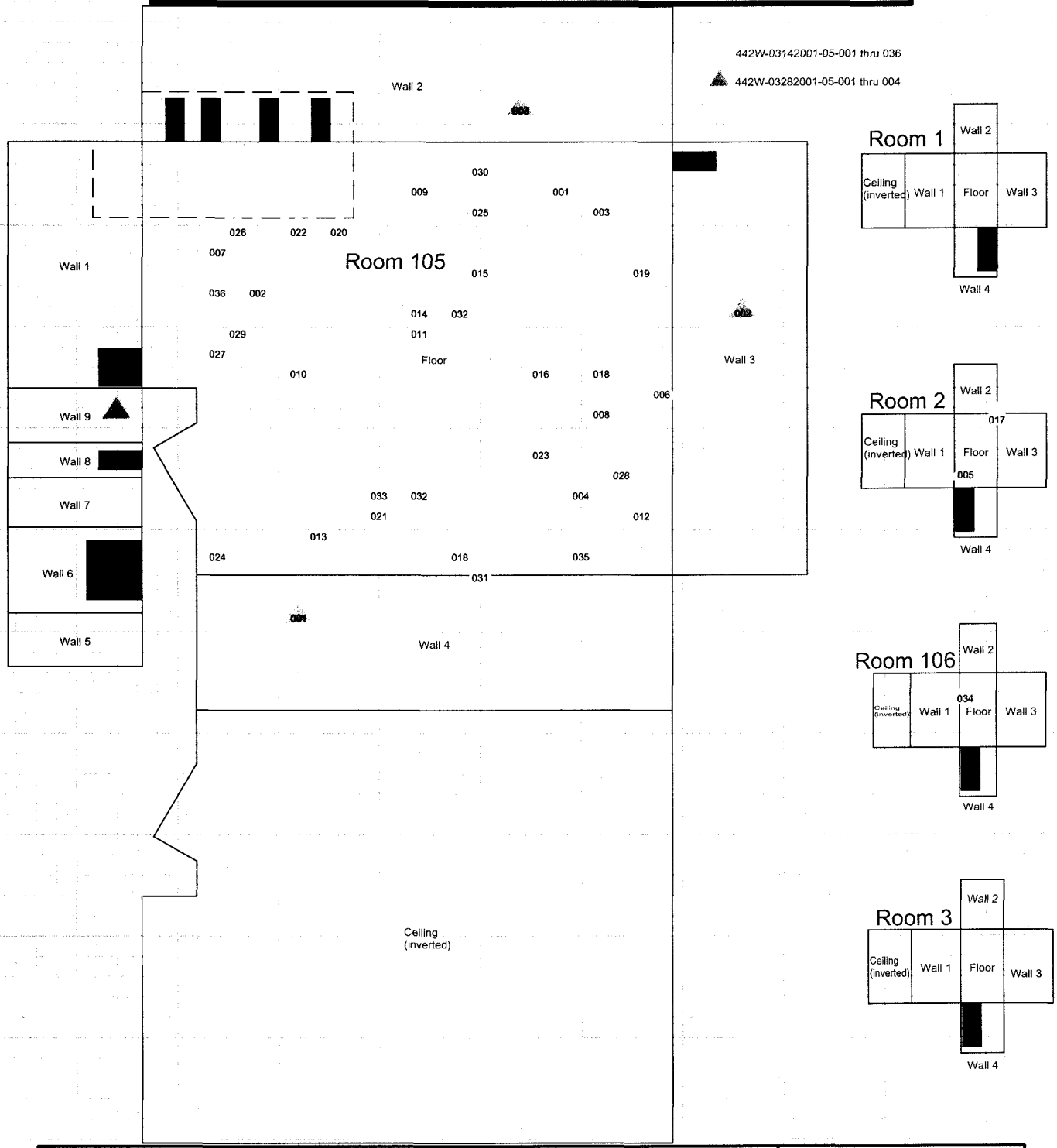
SAMPLE DATE: _____ SAMPLED BY: _____ PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
TSSIA-04182001-05-001	floor tile	12"x12" yellow/brown with yellow mastic	Entrance to Men's Room
TSSIA-04182001-05-002	floor tile	" " " " " "	Center of Main Room
TSSIA-04182001-05-003	floor tile	12"x12" white with blue streak & yellow mastic	Center of Main Room
TSSIA-04182001-05-004	floor tile	" " " " " "	Hallway to rooms 7&8
TSSIA-04182001-05-005	drywall	ceiling drywall with vinyl covering - no tape/joint compound	Center of Main Room
TSSIA-04182001-05-006	drywall	ceiling drywall with vinyl covering - no t.j.c.	Hall entrance to Room 7&8
TSSIA-04182001-05-007	drywall	ceiling drywall with vinyl covering - no t.j.c.	Room 8
TSSIA-04182001-05-008	misc.	pink interior duct insulation	Main Room
TSSIA-04182001-05-009	misc.	roof tar-black	Roof

Metal roof with black tar patches
Interior walls - wood panels over wood frame - hollow
Exterior walls - wood panels on drywall - no t.j.c. fiberglass insulation inside walls
No floor tile beneath carpet.

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: N/A** **Classification: N/A**
Building: 442W
Survey Unit Description: Interior of B442W



SURVEY MAP LEGEND

- (#) Asbestos Sample Location
- (#) Beryllium Sample Location
- (#) Lead Sample Location
- (#) RCRA/CERCLA Sample Location
- (#) PCB Sample Location

- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL COMPANY

MAP ID: fy2001/01-0303 March 8, 2001

442-A-003

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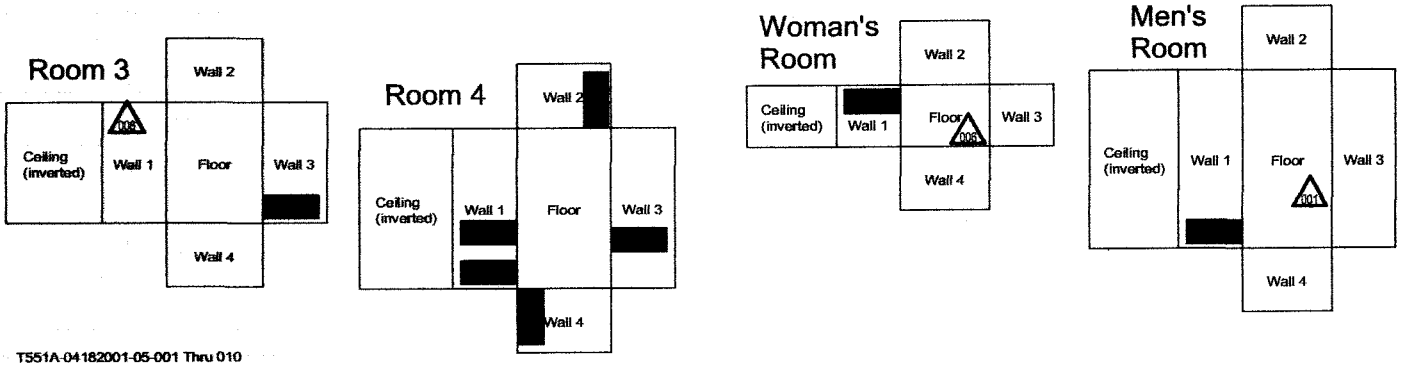
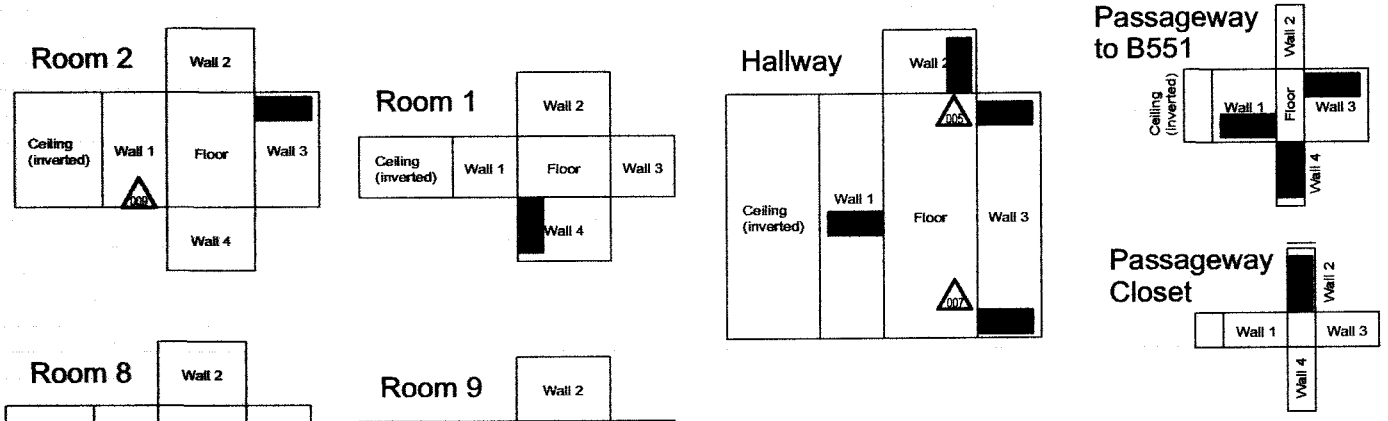
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

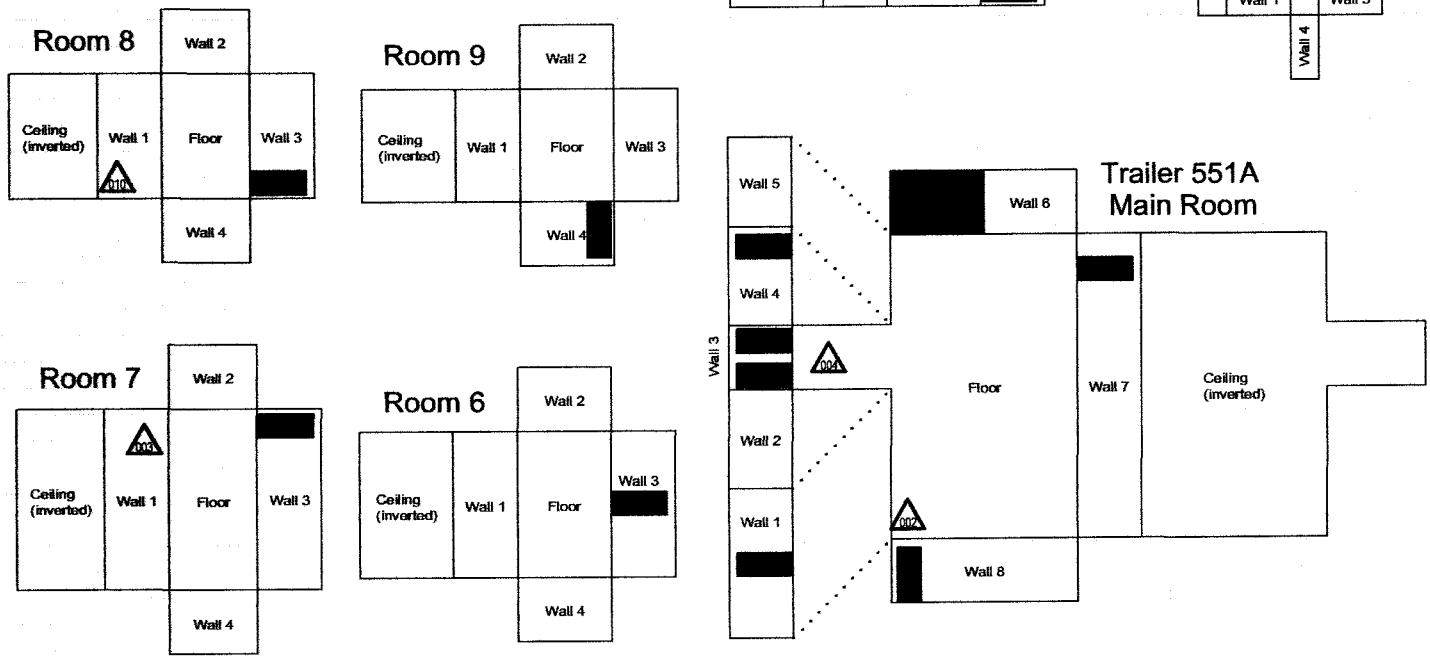
Survey Area: C **Survey Unit: 551-C-005** **Classification: N/A**
Building: Trailer 551A
Survey Unit Description: Interior of T551A

009 T551A-04182001-05-001 Thru 010



T551A-04182001-05-001 Thru 010





SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

KAISER HILL

MAP ID: fy2001/01-0303 March 6, 2001

551-C-005

49

Johns Manville Corporation
10100 West Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
Tel: (303) 978-3724

COVER PAGE

May 17, 2001

Shelly Johnsen
Rocky Flats Environmental Technology Site
P.O. Box 464, Bldg. 881
Golden, CO 80402-0464

Laboratory Report ID	01051503
Laboratory Name:	Johns Manville IH Lab
Subcontract Number:	KH800188
RIN:	01D0711
Requestor:	Andre Gonzalez
P.O./Charge Code:	EFD41712

Dear Ms. Johnsen:

The Johns Manville Industrial Hygiene Laboratory has performed the following analytical testing services as requested. The results were calculated based upon the information supplied on the submission form. All laboratory data have been filed and are available upon request. The Johns Manville Laboratory is accredited by the American Industrial Hygiene association (AIHA) in the industrial hygiene program (Certificate #056), and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the RFETS specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Sincerely,

Marilyn Andrews
Manager of Analytical Services
May 17, 2001

50

May 17, 2001

Laboratory Report ID: 01051503
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0711
Requestor: Andre Gonzalez
P.O./Charge Code: EFD41712

Scope of Work:

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
01D0711-001.001	T551A04182001-05-001	01051503-001	NR01A001	WIPE	QU010516-B
01D0711-002.001	T551A04182001-05-002	01051503-002	NR01A001	WIPE	QU010516-B
01D0711-003.001	T551A04182001-05-003	01051503-003	NR01A001	WIPE	QU010516-B
01D0711-004.001	T551A04182001-05-004	01051503-004	NR01A001	WIPE	QU010516-B
01D0711-005.001	T551A04182001-05-005	01051503-005	NR01A001	WIPE	QU010516-B
01D0711-006.001	T551A04182001-05-006	01051503-006	NR01A001	WIPE	QU010516-B
01D0711-007.001	T551A04182001-05-007	01051503-007	NR01A001	WIPE	QU010516-B
01D0711-008.001	T551A04182001-05-008	01051503-008	NR01A001	WIPE	QU010516-B
01D0711-009.001	T551A04182001-05-009	01051503-009	NR01A001	WIPE	QU010516-B
01D0711-010.001	T551A04182001-05-010	01051503-010	NR01A001	WIPE	QU010516-B

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Commodore Advanced Sciences **RFETS**	**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** 01051503 Due: 5/22/01	C.O.C. # **01D0711#001** Page 1 of 2

Sampler(s) ANDRE GONZALEZ (time/date)	**Contact/Requester** JOHNSEN, SHELLY	**Telephone No.** 6401
RIN 01D0711	**Sampling Origin** T551 A	**Purchase Order/Charge Code** EFD41712
Project Title T551A BE SMEARS	**Logbook No.** N/A	**Ice Chest No.** N/A **Temp.**
To (Lab) Johns Manville	**Method of Shipment** FEDERAL EXPRESS	**Bill of Lading/Air Bill No.** 4533-2127- 3859
Protocol	**Related COC (if any)**	**PRE** 010418-00116-001

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES or (NO)
Are other known hazardous substances present? YES or (NO)
** ** **

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS Hold Time

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
01D0711-001.001	T551A04182001-05-001	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-002.001	T551A04182001-05-002	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-003.001	T551A04182001-05-003	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-004.001	T551A04182001-05-004	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-005.001	T551A04182001-05-005	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-006.001	T551A04182001-05-006	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-007.001	T551A04182001-05-007	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None

Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time
D. Miller 5-14-01 1500	Fed Ex	Fed-ex	D. Slate 5/15/01 10:30
Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time
Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time
Relinquished By: Date/Time	Received By: Date/Time	Relinquished By: Date/Time	Received By: Date/Time

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)	Disposed By	Date/Time

Commodore Advanced Sciences	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 01051503	C.O.C. # 01D0711#001
		Page 2 of 2

RIN	Contact/Requestor	Telephone No.
01D0711	JOHNSEN, SHELLY	6401

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
01D0711-008.001	T551A04182001-05-008	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-009.001	T551A04182001-05-009	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0711-010.001	T551A04182001-05-010	FILTER	04/18/2001	7:00 AM	T551 A	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None

HC 5/14/01

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
L. Miller	5-14-01/1500	Fed EX		Fed-ex		J. Slate	5/15/01 10:30
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)	Disposed By	Date/Time

NARRATIVE

The laboratory did not encounter any problems or questions associated with the receipt of samples into the laboratory. All samples identified on the Chain-of-Custody (COC) form were received and accepted in good condition with tamper-resistant seals intact. (1.d, 4.b, 4.e)

Whatman 4 or Whatman 41 swipe samples were submitted in this project and analyzed for the identification and quantitation of beryllium in accordance with Line Item Code (LIC), NR01A001. The methodology does not define any required specific holding times for the compound on the sampling media. Results of the sample analyses were generated and reported by the specified turn-around time (TAT). (4.f, 5.6, 5.f, 6.b.7)

The laboratory preparation of samples in this project was performed following laboratory Standard Operating Procedure (SOP), IH M-1.02, Revision N. Additional references to the preparation technique of this sample type are addressed in EPA Method, 3015A and CEM Application Procedure, MS-9. The samples were prepared using the CEM Microwave Sample Preparation System, Model MDS 2000. The instrumental sample analysis for these samples follows SOP, IH M-1.04, Revision N, which covers the analytical procedure outlined in OSHA method, ID-125G. Start-up and calibration of the Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) instrument are performed following manufacturer's instructions and are addressed in SOP, IH M-1.03, Revision N. (5.a)

Results of all calibration verifications (initial and continuing), method blanks (calibration and matrix), Laboratory Control Samples (LCSs), Laboratory Control Sample Duplicates (LCDs) and internal QA/QC program monitoring standards for this analytical batch are within acceptable limits as specified in Statement of Work (SOW) modules, GR01-B.3 and NR01-A. (5.c, 5.d.2, 5.d.3, 6.b.2-6)

The internal quality control procedures for statistical monitoring of analytical data to ensure the production of quality results with continuing high validity are addressed in the JMTC IH Laboratory Quality Assurance Manual, Section 10.0. Results of all method-specific QC assessments for this analytical batch are within acceptable limits in accordance with SOW modules, GR01-B.3 and NR01-A. (5.c, 6.b.1)

The Instrument Detection Limit (IDL) has been determined to be 0.00028 mg/ml using the ICP-AES instrument, Perkin Elmer - Optima model 3000DV. Method Detection Limit (MDL) determinations are performed in accordance with the EPA Method contained in 40 CFR Part 136, Appendix B. The MDL for beryllium on the Whatman swipe matrix by ICP-AES has been determined to be 0.012 mg/swipe. These values meet the required detection limits for SOW module, NR01-A. (5.d.1) The sample batch did not require any sample re-analyses due to dilutions or any anomalies. (5.d) The qualifiers used for the results page are "U" for non-detect and "J" for levels greater than the MDL, but less than the Reporting Limit.

The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate N. 056) and continues to rate proficient within the Proficiency Analytical Testing (PAT) program. This program is designed for laboratories involved in analyzing samples taken in the workplace environment. The JMTC IH Analytical Laboratory is also accredited in the Environmental Lead Laboratory Accreditation Program (ELLAP), which is recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP). This program accredits and monitors performance of laboratories testing for lead in environmental samples such as paint, soil, dust wipes and air. (5.a)

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May 17, 2001

Laboratory Report ID 01051503
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0711
Requestor: Andre Gonzalez
P.O./Charge Code: EFD41712

QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION			Q	Air Vol or Time	Air Concentration
				Back Section	Front Section	Total			
T551A04182001-05-001	01051503-001	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-002	01051503-002	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-003	01051503-003	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-004	01051503-004	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-005	01051503-005	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-006	01051503-006	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-007	01051503-007	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-008	01051503-008	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-009	01051503-009	Beryllium	0.1 µg			< 0.1 µg	U		
T551A04182001-05-010	01051503-010	Beryllium	0.1 µg			< 0.1 µg	U		

May 17, 2001

Laboratory Report ID 01051503
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0711
Requestor: Andre Gonzalez
P.O./Charge Code: EFD41712

QC RESULTS SUMMARY

QC Parameter	QC Item Type	Compound	Expected Recovery	Actual Recovery	Percent Recovery	QC Sample ID	Date Analyzed	Instrument Run
Preparation Blank	PB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		5/16/01	QU010516-B
Matrix Blank	MB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		5/16/01	QU010516-B
Matrix Blank Spike	MS1	Beryllium	5.0 µg	5.17 µg	103.4		5/16/01	QU010516-B
Laboratory Control Sample	LC1	Beryllium	10.0 µg	9.90 µg	99	QC01050310	5/16/01	QU010516-B
Laboratory Control Duplicate	LC1a	Beryllium	10.0 µg	10.0 µg	100	QC01050310	5/16/01	QU010516-B

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0711

Name of Originator: A. Gonzalez Title: IH&S Bldg/Ext: 116 / x6727 Date: 4/18/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk / REMARKS	Lab Number
TSSIA-04182001-05-001	Beryllium					NR01A001	
TSSIA-04182001-05-002	↓					↓	
TSSIA-04182001-05-003	↓					↓	
TSSIA-04182001-05-004	↓					↓	
TSSIA-04182001-05-005	↓					↓	
TSSIA-04182001-05-006	↓					↓	
TSSIA-04182001-05-007	↓					↓	
TSSIA-04182001-05-008	↓					↓	
TSSIA-04182001-05-009	↓					↓	
TSSIA-04182001-05-010	↓					↓	

[signature] No hazardous substances used [initials] 5/14/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	0936 5/14/01			

Report and Billing Instruction

- Kaiser-Hill ☒ Verbal To: A Gonzalez
- RMRS ☐ Fax To: 6678
- SSOC ☐ Report To: A Gonzalez
- DynCorp ☐ Bill To: KH
- WSI ☐ P.O.#/Release: EF04111?
- Lab: TM

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Analysis Request

Industrial Hygiene Sample: ☒ Standard Service ☐ Rush ☐ Other____

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other____

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

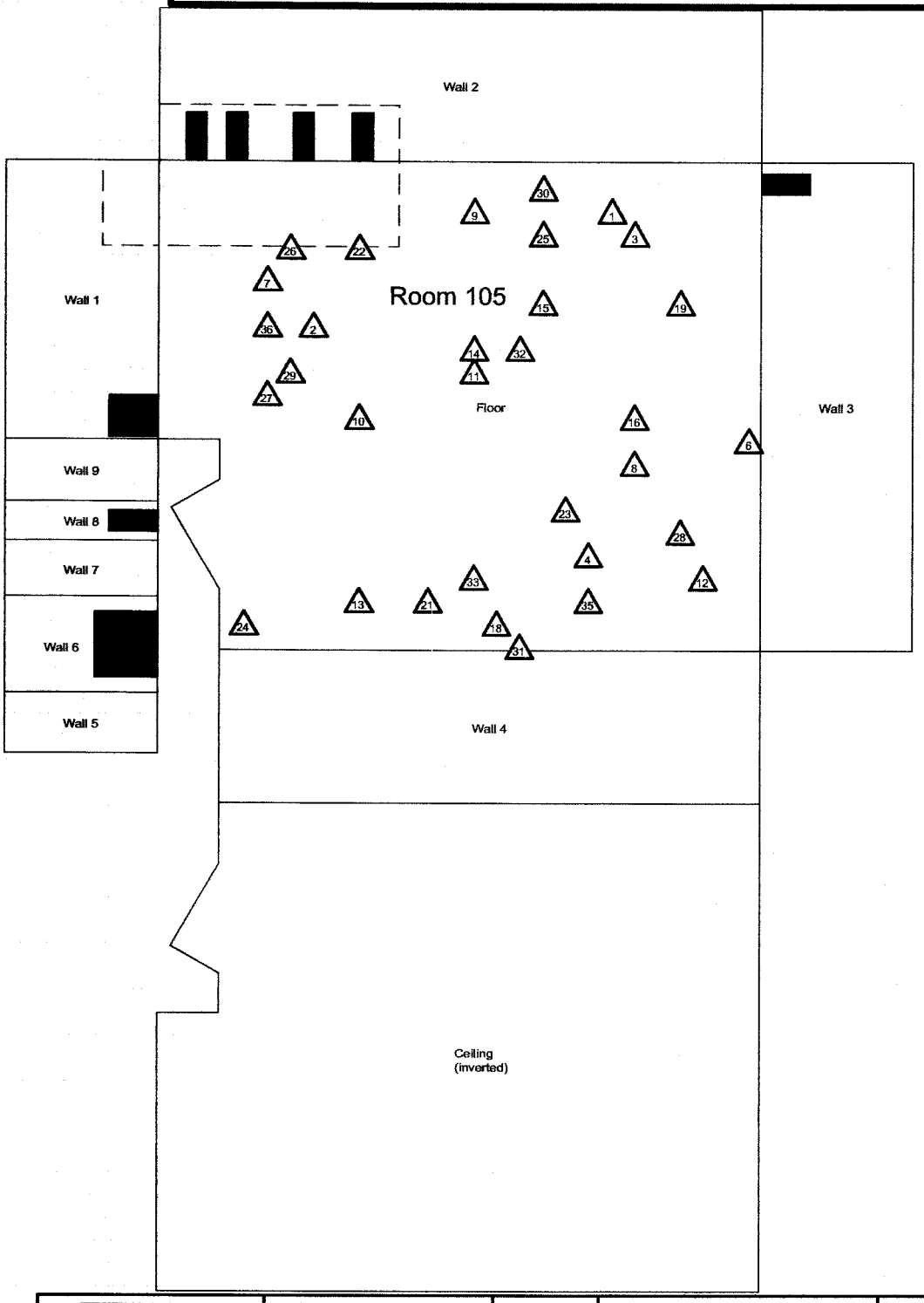
Signature:

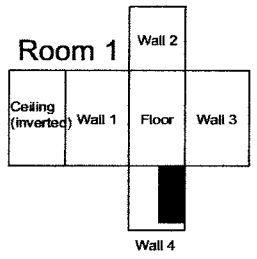
Comments: unable to verify [illegible] [signature]

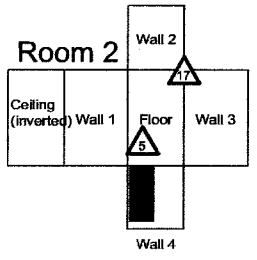
White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

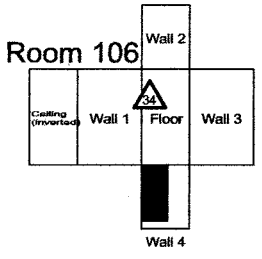
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

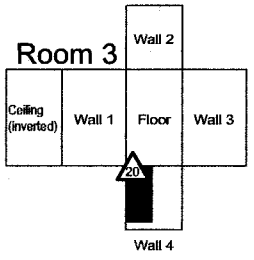
Survey Area: A **Survey Unit: 442-A-003** **Classification: N/A**
Building: 442W
Survey Unit Description: Interior of B442W











SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0303 March 8, 2001

442-A-003

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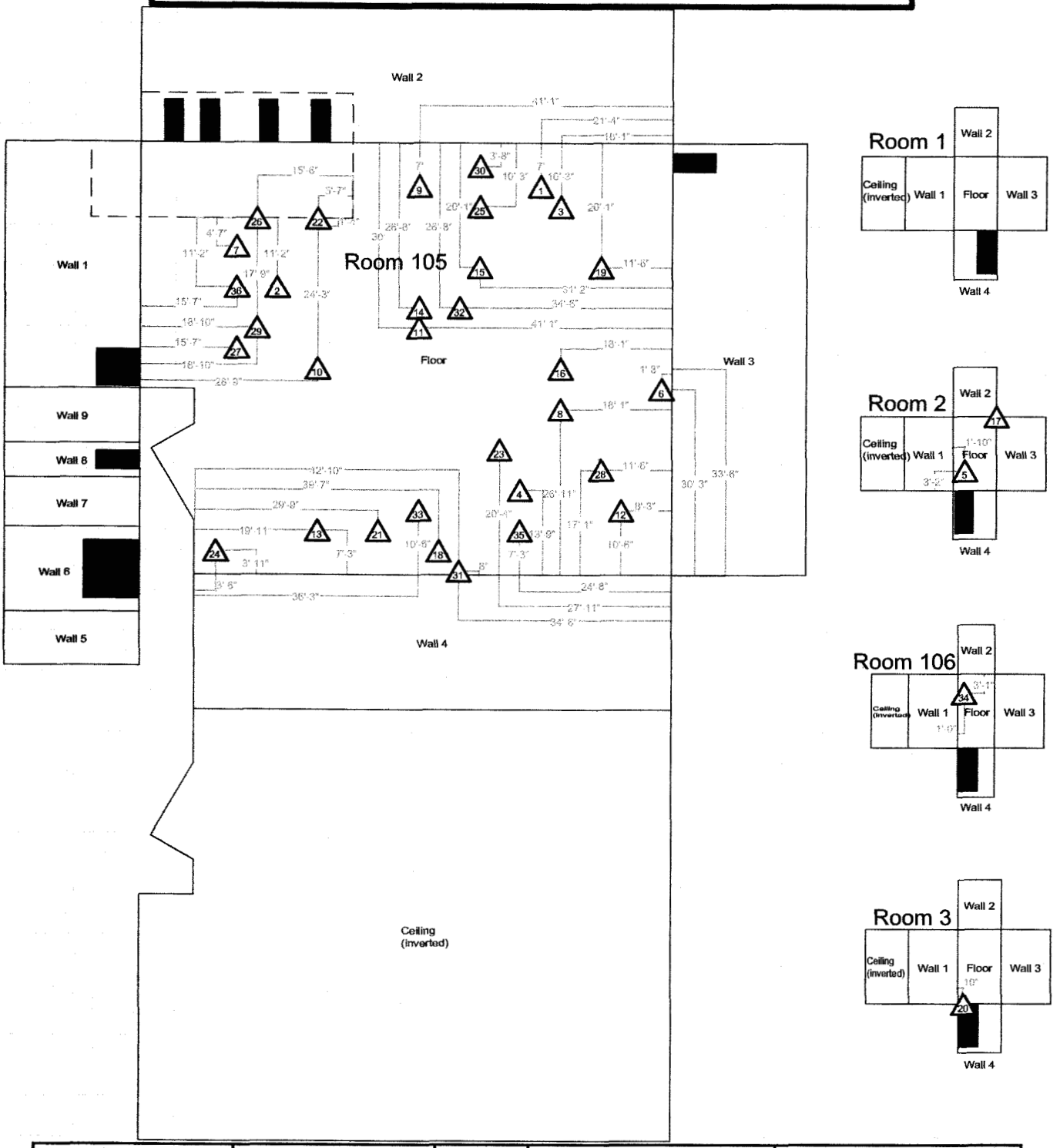
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: 442-A-003** **Classification: N/A**
Building: 442W
Survey Unit Description: Interior of B442W



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

MAP ID: fy2001/01-0303 March 8, 2001

442-A-003

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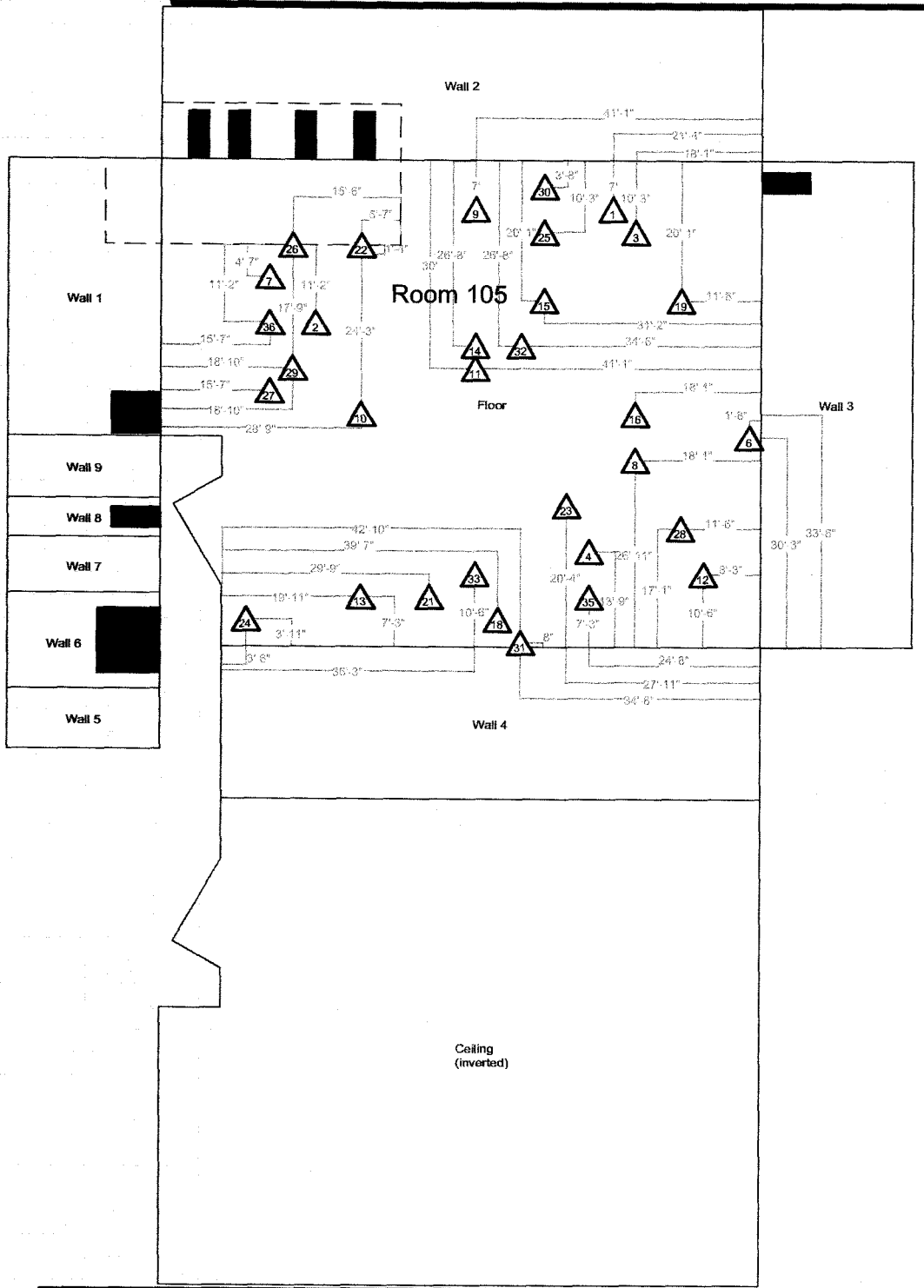
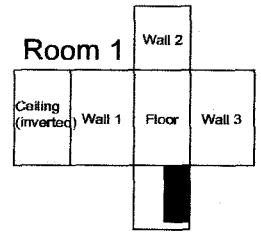
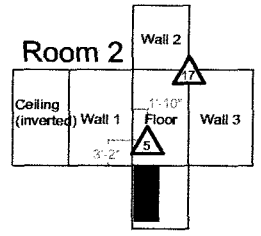
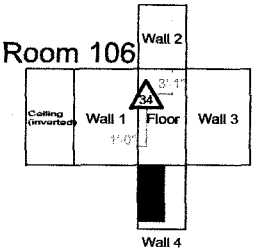
PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

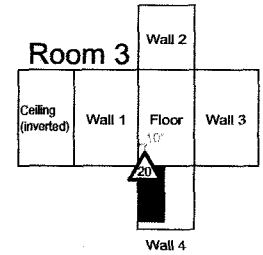
Survey Area: A **Survey Unit: 442-A-003** **Classification: N/A**
Building: 442W
Survey Unit Description: Interior of B442W











SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

KAISER HILL

MAP ID: fy2001/01-0303 March 8, 2001

442-A-003

April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03142001-05-031	01032806-047	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-032	01032806-048	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-033	01032806-049	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-034	01032806-050	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-035	01032806-051	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-036	01032806-052	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-037	01032806-053	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-038	01032806-054	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-039	01032806-055	Beryllium			< 0.1 µg	TR1	U	7440-41-7

April 2, 2001

Laboratory Report ID: 01032903
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0654
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code:	NR01A001	Reporting Limit:	0.1 µg
Sample Matrix:	WIPE	Date Received:	03/29/01
Analytical Method:	OSHA ID-125G	Date Analyzed:	04/02/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION			T	Q	Constituent ID
			Backup	Main	Total			
442W-03282001-05-001	01032903-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-002	01032903-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-003	01032903-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-004	01032903-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-001	01032903-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-002	01032903-006	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-003	01032903-007	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-004	01032903-008	Beryllium			< 0.1 µg	TR1	U	7440-41-7

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: A. Gonzalez   Title: Bldg/Ext: Date: Page 2 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-001	BE						V401A001	
442W-03142001-05-002	↓						↓	
442W-03142001-05-003	↓						↓	
442W-03142001-05-004	↓						↓	
442W-03142001-05-005	↓						↓	
442W-03142001-05-006	↓						↓	
442W-03142001-05-007	↓						↓	
442W-03142001-05-008	↓						↓	
442W-03142001-05-009	↓						↓	
442W-03142001-05-010	↓						↓	
442W-03142001-05-011	↓						↓	
442W-03142001-05-011	↓						↓	
442W-03142001-05-013	↓						↓	
442W-03142001-05-014	↓						↓	
442W-03142001-05-015	↓						↓	
442W-03142001-05-016	↓						↓	

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	J. Yancey	0940 3/27/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☑
- RMRS ☐
- SSOC ☐
- DynCorp ☐
- WSI ☐

Verbal To: ____
Fax To: ____
Report To: ____
Bill To: ____
P.O.#/Release: E0035422
Lab: 3M

63

Analysis Request

Industrial Hygiene Sample: ☒ Standard Service ☐ Rush ☐ Other____

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other____

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature: ____
Comments: ____

White - Return to Originator   Yellow - Lab Copy   Green - Sample Custodian   Blue - Originator

RFP F"3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: Arlo Gonzalez Title: IH Tech Bldg/Ext: 116/6727 Date: 3/26/01 Page 3 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-017	BE						NADIA 001	
442W-03142001-05-018	↓						↓	
442W-03142001-05-019								
442W-03142001-05-020								
442W-03142001-05-021								
442W-03142001-05-022								
442W-03142001-05-023								
442W-03142001-05-024								
442W-03142001-05-025								
442W-03142001-05-026								
442W-03142001-05-027								
442W-03142001-05-028								
442W-03142001-05-029								
442W-03142001-05-030								
442W-03142001-05-031								
442W-03142001-05-032	↓						↓	

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	J. Vincent	0940 3/27/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☑ Verbal To: SAME
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To:
- WSI ☐ P.O.#/Release:
- Lab:

GV

Analysis Request

Industrial Hygiene Sample: ☑ Standard Service ☐ Rush ☐ Other____

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other____

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:____

Comments:____

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: A. Gonzales Title: IH Bldg/Ext: 116/ 26722 Date: 3/26/01 Page 4 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk REMARKS	Lab Number
442W-03142001-05-033	BE					NR01A001	
442W-03142001-05-034	↓					↓	
442W-03142001-05-035	↓					↓	
442W-03142001-05-036	↓					↓	
442W-03142001-05-037	↓					↓	
442W-03142001-05-038	↓					↓	
442W-03142001-05-039	↓					↓	

3/26/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	0910 3/27/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☒
- RMRS ☐
- SSOC ☐
- DynCorp ☐
- WSI ☐

Verbal To: ______
Fax To: ______
Report To: ______
Bill To: ______
P.O.#/Release: ______
Lab: ______

NONE

Analysis Request

Industrial Hygiene Sample: ☒ Standard Service ☐ Rush ☐ Other______

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other______

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature: ______
Comments: ______

65

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

SURVEY UNIT 442-A-001 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	11	14		1	13	28
	1	45	53		1	53	1
1	1	48	9		1	53	26
	1	47	55		1	19	2
	1	38	36		1	46	20
	1	25	32		1	26	29
	1	2	30		1	29	23
	1	21	18		1	0	23
	1	32	10	2	1	38	20
	1	21	35		1	40	49
	1	39	16	3	1	37	22
	1	46	36		1	21	21
	1	55	17		1	28	1
	1	46	19		1	4	17
	1	30	8	4	1	42	23
	1	48	25		1	55	36
	1	20	14	5	1	11	7
	1	9	14		1	32	28
	1	35	12		1	52	47
	1	16	15		1	32	13
	1	18	30		1	9	12
	1	48	26		1	7	17
	1	52	17		1	47	20
	1	0	38		1	14	51
	1	35	35		1	19	36
	1	52	11		1	30	1
	1	19	17		1	50	5
	1	41	1		1	13	52
	1	37	42		1	4	25
	1	34	15		1	5	48
	1	1	42		1	17	25
	1	19	8		1	10	27
	1	36	39		1	47	52
	1	48	13		1	49	7
	1	14	13		1	34	2
	1	32	15		1	1	30
	1	46	28	6	1	20	39
	1	55	18		1	10	50
	1	4	10	7	1	28	10
	1	10	17		1	2	7
	1	5	46		1	12	15
	1	2	20		1	35	8
	1	51	24		1	32	34
	1	45	38		1	54	18
	1	21	50		1	17	46

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
BMP 2/20/01

3/8/01

66

SURVEY UNIT 442-A-001 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	18	53		1	38	35
	1	2	7		1	47	3
	1	13	2		1	4	54
	1	33	17		1	19	13
	1	16	34		1	7	21
	1	12	43		1	41	2
	1	36	33		1	2	5
	1	35	5	9	1	45	9
	1	3	34		1	16	55
	1	7	51		1	55	31
	1	54	47		1	6	25
	1	42	11		1	7	50
	1	42	53		1	8	14
	1	53	0		1	54	41
	1	19	40		1	19	6
	1	3	30		1	51	50
	1	19	30		1	48	47
	1	5	19		1	44	40
	1	13	2		1	47	4
	1	4	30		1	45	0
	1	15	31	10	1	43	24
	1	25	53		1	28	15
	1	9	3		1	55	33
	1	10	36		1	26	54
8	1	27	49		1	11	34
	1	6	48		1	37	48
	1	44	55		1	40	29
	1	14	24		1	16	35
	1	9	18		1	53	16
	1	53	47		1	55	44
	1	34	4		1	47	43
	1	49	22		1	6	6
	1	23	10		1	44	18
	1	1	34		1	32	4
	1	3	30		1	3	30
	1	30	4		1	25	54
	1	43	19		1	34	25
	1	47	45		1	54	24
	1	19	19		1	37	3
	1	55	52		1	5	55
	1	11	5		1	47	2
	1	50	25		1	31	42
	1	29	43		1	43	14
	1	23	18		1	35	44
	1	33	50	11	1	38	22

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
MP 7/20/01

SURVEY UNIT 442-A-001 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	8	20		1	42	10
	1	14	26		1	36	31
	1	39	49		1	36	37
	1	17	49		1	53	22
	1	32	26		1	31	22
12	1	20	45		1	27	23
	1	48	30		1	17	6
	1	15	19		1	15	16
	1	16	28		1	35	43
	1	51	43		1	53	28
	1	46	43		1	1	17
	1	11	27		1	26	8
	1	53	30		1	2	17
	1	41	14		1	19	9
	1	2	44		1	16	14
	1	18	32		1	25	53
	1	35	54		1	27	5
	1	2	12		1	2	21
	1	21	33		1	9	52
	1	45	55		1	52	11
13	1	28	47		1	32	9
	1	4	37		1	9	37
	1	2	18		1	34	13
	1	45	12		1	39	13
	1	31	16		1	50	25
	1	31	5		1	48	24
	1	19	26		1	16	0
	1	40	34		1	32	55
	1	48	25		1	44	9
14	1	20	47		1	47	48
	1	36	44		1	51	4
	1	37	28		1	4	43
	1	16	31		1	36	20
	1	51	24		1	36	14
	1	38	31		1	27	11
	1	48	35		1	25	10
	1	49	39		1	30	17
	1	13	22		1	43	45
	1	33	17		1	16	23
	1	27	22		1	46	49
	1	20	3		1	46	0
15	1	44	9		1	24	1
	1	17	20		1	15	20
	1	16	5		1	13	23
	1	8	17		1	50	32

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
MAP 3/20/01

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SURVEY UNIT 442-A-003 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
1	1	28	47	30	1	25	48
2	1	15	42	~~31~~	1	35	26
	1	45	15	~~32~~	1	32	1
	1	7	0		1	36	52
~~3~~	1	53	47		1	45	38
~~4~~	1	47	10	33	1	22	31
~~5~~	1	7	32		1	46	12
~~6~~	1	15	16	~~34~~	1	36	48
	1	55	5	35	1	27	30
~~7~~	1	23	20		1	38	39
	1	48	14	~~36~~	1	16	55
~~8~~	1	49	25	3	1	29	46
~~9~~	1	26	54		1	3	35
~~10~~	1	47	19		1	10	13
~~11~~	1	48	21		1	19	17
	1	4	9		1	34	6
	1	50	27		1	47	28
	1	15	16		1	47	6
	1	53	2		1	49	49
	1	37	5		1	51	13
~~12~~	1	7	23	4	1	27	32
~~13~~	1	40	36		1	9	21
~~14~~	1	26	25		1	24	52
	1	54	16	5	1	49	33
15	1	25	43	6	1	34	37
~~16~~	1	15	4		1	10	1
~~17~~	1	6	27		1	43	17
	1	37	0		1	36	3
~~18~~	1	34	15		1	37	15
19	1	31	43		1	37	41
20	1	48	6		1	5	48
21	1	20	30	7	1	13	44
~~22~~	1	38	39		1	2	53
23	1	26	34		1	42	54
	1	37	38		1	31	27
	1	43	17		1	38	14
	1	1	12	8	1	29	36
~~24~~	1	28	54	9	1	22	47
25	1	25	46	10	1	17	38
	1	40	26		1	5	45
26	1	14	47		1	6	41
27	1	13	39		1	27	26
~~28~~	1	30	22		1	52	5
~~29~~	1	25	50		1	30	52
	1	3	21	11	1	22	40

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
DMP 2/21/01

3/8/01

69

SURVEY UNIT 442-A-003 CHEMICAL
RANDOM START DATA SHEET

Measurement Location	Page	X-Coord	Y-Coord	Measurement Location	Page	X-Coord	Y-Coord
	1	7	48	22	1	17	46
	1	7	31		1	24	54
12	1	32	31		1	29	19
	1	46	24		1	6	3
	1	2	47		1	19	20
	1	36	49		1	5	23
	1	10	54		1	44	14
	1	40	40		1	40	40
	1	46	29		1	47	8
	1	28	22		1	8	4
	1	51	47		1	12	2
	1	18	26		1	53	13
13	1	17	30		1	11	16
	1	44	24		1	34	17
	1	45	16	24	1	12	29
14	1	22	41		1	35	32
	1	37	15	28	1	31	33
	1	4	51	29	1	14	40
	1	41	12		1	14	15
16	1	29	38		1	39	55
	1	36	19		1	42	20
17	1	51	36		1	25	25
	1	50	29	31	1	24	28
	1	51	21		1	29	15
	1	35	4		1	23	55
	1	37	52	32	1	24	41
18	1	23	29		1	37	54
	1	49	29		1	19	17
	1	22	7		1	2	40
	1	46	22		1	6	33
	1	53	32		1	26	21
	1	4	14		1	17	16
	1	42	25	34	1	49	22
	1	47	25		1	53	7
	1	19	8	36	1	13	42
	1	53	29		1	9	28
	1	24	51		1	4	52
	1	18	51		1	25	53
	1	3	28		1	38	23
	1	4	44		1	46	21
	1	36	26		1	25	34
	1	35	30		1	26	12
	1	10	21		1	35	55
	1	0	32		1	38	25
	1	43	18		1	7	33

LEGEND:

C-N/A = UNPAINTED CEILING
X-N/A = > NUMBER OF SAMPLES REQUIRED

REVIEWED BY SIGNATURE:
DAF 7/21/01

Johns Manville

Johns Manville Corporation
10100 W. Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
303 978 2000

COVER PAGE

April 2, 2001

Rocky Flats Environmental Technology Site
Ms. Shelly Johnsen
P.O. Box 464, Building 881
Golden, CO 80402-0464

Laboratory Report ID: 01032903
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0654
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

Dear Ms. Johnsen:

The Johns Manville Technical Center (JMTC) has performed the following analytical services as requested. The results are calculated based upon the information supplied on the submission form. All laboratory data has been filed and are available upon request.
The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate No. 056) and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

Scope of Work:

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0654-001.001	442W-03282001-05-001	01032903-001	NR01A001	WIPE
Beryllium	01D0654-002.001	442W-03282001-05-002	01032903-002	NR01A001	WIPE
Beryllium	01D0654-003.001	442W-03282001-05-003	01032903-003	NR01A001	WIPE
Beryllium	01D0654-004.001	442W-03282001-05-004	01032903-004	NR01A001	WIPE
Beryllium	01D0654-005.001	442L-03282001-05-001	01032903-005	NR01A001	WIPE
Beryllium	01D0654-006.001	442L-03282001-05-002	01032903-006	NR01A001	WIPE
Beryllium	01D0654-007.001	442L-03282001-05-003	01032903-007	NR01A001	WIPE
Beryllium	01D0654-008.001	442L-03282001-05-004	01032903-008	NR01A001	WIPE

Comments: No problem were encountered with sample receiving and sample analysis

I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy sample package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Scott A. Steiner
Industrial Hygiene Project Manager

Date

April 2, 2001

Laboratory Report ID: 01032903
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0654
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/29/01
Date Analyzed: 04/02/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03282001-05-001	01032903-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-002	01032903-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-003	01032903-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03282001-05-004	01032903-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-001	01032903-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-002	01032903-006	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-003	01032903-007	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03282001-05-004	01032903-008	Beryllium			< 0.1 µg	TR1	U	7440-41-7

12

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request 0100654

Name of Originator: Andie Gonzalez Title: IH&S Bldg/Ext: 116X6727 Date: 3/28/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03282001-05-001	Beryllium						NR01A001	
442W-03282001-05-002	↓						↓	
442W-03282001-05-003								
442W-03282001-05-004								
442L-03282001-05-001								
442L-03282001-05-002								
442L-03282001-05-003								
442L-03282001-05-004								

3/28/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
		15:38 3/28/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☒ Verbal To: A Gonzalez
- RMRS ☐ Fax To: 6678
- SSOC ☐ Report To: A Gonzalez
- DynCorp ☐ Bill To: KH
- WSI ☐ P.O.#/Release: EDD3042V
- 73 Lab: JM

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #) 3/28/01

Condition of Seal: ☐ Broken ☐ Unbroken

Signature: NO NO FY/HC

Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: Andre Gonzalez Title: IH01 Bldg/Ext: 1161 6727 Date: 3/20/01 Page 1 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk / REMARKS	Lab Number
4426-03142001-05-001	BE					MR01A001	
4426-03142001-05-002	↓					↓	
4426-03142001-05-003							
4426-03142001-05-004							
4426-03142001-05-005							
4426-03142001-05-006							
4426-03142001-05-007							
4426-03142001-05-008							
4426-03142001-05-009							
4426-03142001-05-010							
4426-03142001-05-011							
4426-03142001-05-012						[illegible]	
4426-03142001-05-013							
4426-03142001-05-014							
4426-03142001-05-015							
4426-03142001-05-016	↓					↓	

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	J. Yancey	0910 3/27/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☒
- RMRS ☐
- SSOC ☐
- DynCorp ☐
- WSI ☐

Verbal To: A. Gonzalez
Fax To: 6678
Report To: A. Gonzalez
Bill To: KH
P.O.#/Release: FDD30120
Lab: JM

74

Analysis Request

Industrial Hygiene Sample: ☒ Standard Service ☐ Rush ☐ Other____

Asbestos Samples: ☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other____

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:____

Comments: unable to verify contents of RIN 01D0632 [initials] 3/27/01

White - Return to Originator   Yellow - Lab Copy   Green - Sample Custodian   Blue - Originator

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

0100632

Name of Originator: A. Gomez Title: Bldg/Ext: Date: Page 2 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-03142001-05-001	BE						NH=1A001	
442W-03142001-05-002								
442W-03142001-05-003								
442W-03142001-05-004								
442W-03142001-05-005								
442W-03142001-05-006								
442W-03142001-05-007								
442W-03142001-05-008								
442W-03142001-05-009								
442W-03142001-05-010								
442W-03142001-05-011								
442W-03142001-05-012								
442W-03142001-05-013								
442W-03142001-05-014								
442W-03142001-05-015								
442W-03142001-05-016								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	[signature]	0440 3/27/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill ☒ Verbal To: _____
RMRS ☐ Fax To: _____
SSOC ☐ Report To: _____
DynCorp ☐ Bill To: _____
WSI ☐ P.O.#/Release: EDU5W22
75 Lab: JM

Analysis Request

Industrial Hygiene Sample
☒ Standard Service ☐ Rush ☐ Other _____

Asbestos Samples
☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other _____

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken
Signature: _____
Comments: _____

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: Andy Gonzalez Title: IH&S Bldg/Ext: 116/6727 Date: 3/26/01 Page 3 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-01142001-05-017	BE						NAU1A021	
442W-01142001-05-018								
442W-01142001-05-019								
442W-01142001-05-020								
442W-01142001-05-021								
442W-01142001-05-022								
442W-01142001-05-023								
442W-01142001-05-024								
442W-01142001-05-025								
442W-01142001-05-026								
442W-01142001-05-027								
442W-01142001-05-028								
442W-01142001-05-029								
442W-01142001-05-030								
442W-01142001-05-031								
442W-01142001-05-032								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
[signature]	J Kinney	0940 3/27/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☒ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To:
- WSI ☐ P.O.#/Release:
- Lab:

SAME

76

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

01D0632

Name of Originator: A. Gonzales Title: THJ Bldg/Ext: 116/x6722 Date: 3/26/01 Page 4 of 4

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
442W-0314A001-05-033	BE						NR01A021	
442W-0314A001-05-034								
442W-0314A001-05-035								
442W-0314A001-05-036								
442W-0314A001-05-037								
442W-0314A001-05-038								
442W-0314A001-05-039								

3/27/01

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
		0714 3/27/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☒ Verbal To:
- RMRS ☐ Fax To:
- SSOC ☐ Report To:
- DynCorp ☐ Bill To:
- WSI ☐ P.O.#/Release:
- Lab:

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Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03142001-05-008	01032806-024	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-009	01032806-025	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-010	01032806-026	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-011	01032806-027	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-012	01032806-028	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-013	01032806-029	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-014	01032806-030	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-015	01032806-031	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-016	01032806-032	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-017	01032806-033	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-018	01032806-034	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-019	01032806-035	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-020	01032806-036	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-021	01032806-037	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-022	01032806-038	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-023	01032806-039	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-024	01032806-040	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-025	01032806-041	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-026	01032806-042	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-027	01032806-043	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-028	01032806-044	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-029	01032806-045	Beryllium			< 0.1 µg	TRI	U	7440-41-7
442W-03142001-05-030	01032806-046	Beryllium			< 0.1 µg	TRI	U	7440-41-7

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April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID	
442W-03142001-05-031	01032806-047	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-032	01032806-048	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-033	01032806-049	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-034	01032806-050	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-035	01032806-051	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-036	01032806-052	Beryllium			< 0.1 µg	TR1	U	7440-41-7	
442W-03142001-05-037	01032806-053	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB
442W-03142001-05-038	01032806-054	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB
442W-03142001-05-039	01032806-055	Beryllium			< 0.1 µg	TR1	U	7440-41-7	FB

April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442L-03142001-05-001	01032806-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-002	01032806-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-003	01032806-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-004	01032806-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-005	01032806-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-006	01032806-006	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-007	01032806-007	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-008	01032806-008	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-009	01032806-009	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-010	01032806-010	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-011	01032806-011	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-012	01032806-012	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-013	01032806-013	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-014	01032806-014	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-015	01032806-015	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-03142001-05-016	01032806-016	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-001	01032806-017	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-002	01032806-018	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-003	01032806-019	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-004	01032806-020	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-005	01032806-021	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-006	01032806-022	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-007	01032806-023	Beryllium			< 0.1 µg	TR1	U	7440-41-7

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April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 03/28/01
Date Analyzed: 03/30/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442W-03142001-05-008	01032806-024	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-009	01032806-025	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-010	01032806-026	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-011	01032806-027	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-012	01032806-028	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-013	01032806-029	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-014	01032806-030	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-015	01032806-031	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-016	01032806-032	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-017	01032806-033	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-018	01032806-034	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-019	01032806-035	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-020	01032806-036	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-021	01032806-037	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-022	01032806-038	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-023	01032806-039	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-024	01032806-040	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-025	01032806-041	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-026	01032806-042	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-027	01032806-043	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-028	01032806-044	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-029	01032806-045	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442W-03142001-05-030	01032806-046	Beryllium			< 0.1 µg	TR1	U	7440-41-7

Johns Manville

Johns Manville Corporation
10100 W. Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
303 978 2000

COVER PAGE

May 4, 2001

Rocky Flats Environmental Technology Site
Ms Shelly Johnsen
P.O. Box 464, Building 881
Golden, CO 80402-0464

Laboratory Report ID:	01042710
Laboratory Name:	JMTC IH Analytical Laboratory
Laboratory Code:	JMANS
Subcontract Number:	800188SX6
RIN:	01D0752
Requestor:	Andre Gonzalez
P.O./Charge Code:	EEC50021

Dear Ms. Johnsen:

The Johns Manville Technical Center (JMTC) has performed the following analytical services as requested. The results are calculated based upon the information supplied on the submission form. All laboratory data has been filed and are available upon request.
The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate No. 056) and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

Scope of Work:

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0752-001.001	442L-04262001-05-001	01042710-001	NR01A001	WIPE
Beryllium	01D0752-002.001	442L-04262001-05-002	01042710-002	NR01A001	WIPE
Beryllium	01D0752-003.001	442L-04262001-05-003	01042710-003	NR01A001	WIPE
Beryllium	01D0752-004.001	442L-04262001-05-004	01042710-004	NR01A001	WIPE
Beryllium	01D0752-005.001	442L-04262001-05-005	01042710-005	NR01A001	WIPE

Comments: No problem were encountered with sample receiving and sample analysis.

I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy sample package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Scott A. Steiner
Industrial Hygiene Project Manager

5/4/01
Date

May 4, 2001

Laboratory Report ID: 01042710
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 80018$SX6
RIN: 01D0752
Requestor: Andre Gonzalez
P.O./Charge Code: EEC50021

QUICK RESULTS SUMMARY

Line Item Code: NR01A001
Sample Matrix: WIPE
Analytical Method: OSHA ID-125G

Reporting Limit: 0.1 µg
Date Received: 04/27/01
Date Analyzed: 05/03/01

Customer Number	Laboratory ID Number	Requested Analysis	CONCENTRATION Backup	Main	Total	T	Q	Constituent ID
442L-04262001-05-001	01042710-001	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-002	01042710-002	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-003	01042710-003	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-004	01042710-004	Beryllium			< 0.1 µg	TR1	U	7440-41-7
442L-04262001-05-005	01042710-005	Beryllium			< 0.1 µg	TR1	U	7440-41-7

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Commodore Advanced Sciences, Inc.

RFETS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

01042710 Due: 5/4/01

C.O.C.# **01D0752#001**

Page 1 of 1

Sampler(s) ANDRE GONZALEZ (first/last)	Contact/Requester JOHNSEN, SHELLY	Telephone No. 6401
RIN 01D0752	Sampling Origin 442L	Purchase Order/Charge Code 8ED60123
Project Title 0442L BE SMEARS	Logbook No. N/A	Ice Chest No. N/A Temp.
To (Lab) Johns Manville	Method of Shipment FEDERAL EXPRESS	Bill of Lading/Air Bill No. 4503-2127-
Protocol	Related COC (if any)	PRE 010124-T110C-002

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES or NO
Are other known hazardous substances present? YES or NO
** ** **

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS Hold Time

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative / Packing
01D0752-001.001	442L-04262001-05-001	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-002.001	442L-04262001-05-002	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-003.001	442L-04262001-05-003	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-004.001	442L-04262001-05-004	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0752-005.001	442L-04262001-05-005	FILTER	04/26/2001	7:00 AM	442L	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
					06 4-26-01			

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
C Barron	4-26 01 1500	FED EX		Fed-ex		J. Yate	4/27/01 10:30
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process) Disposed By Date/Time

Industrial Hygiene Information System
Surface Sample Report

RIN: 01D0752

Sample Number/Type: 442L-04262001-05-001 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, SOUTHEAST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-002 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, SOUTHWEST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-003 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, WEST END, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-004 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, NORHTWEST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 442L-04262001-05-005 WIPE Hygienist: ANDRE GONZALEZ
Location Info: ROOM 101, NORTHEAST CORNER, TOP OF LIGHT FIXTURE
Room No: N/A
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)
Concentration: < 0.1000 _ UG/100CM2

RFETS Industrial Hygiene	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# 01D0752#1 Page: 1 of 1

RIN	Contact/Requestor	Telephone No.	MSIN	FAX
01D0752	ANDRE GONZALEZ	3039666727		

Bottle No.	Customer Number	Matrix	Date	Time	Location	No/Type Container	Sample Analysis	Preservative Packing
	442L-04262001-05-001				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-002				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-003				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-004				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None
	442L-04262001-05-005				442L	1-FILTER N/A	BERYLLIUM AND BE COMPOUNDS (AS BE)	N/A None

HC / FedX
CB 4/26/01

Routine Turnaround

Are acid preserved samples DOT Hazardous per 40 CFR Part 136.3 Table II? YES or (NO)
CB 4/26/01

Are other known hazardous substances present? YES or (NO)

unable to verify contents of Rin # 01D0752
CB 4-26-01

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/26/01 1321	C Brown	4-26-01 1321				
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
FINAL SAMPLE DISPOSITION	Disposal method (e.g., Return to customer, per lab procedur, used in process)			Disposed By:		Date/Time	

[redacted]

FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

BE
~~ASBESTOS BULK~~ SAMPLING FORM

CLIENT NAME: _____ LOCATION: _____

SAMPLE DATE: _____ SAMPLED BY: _____ PROJECT NUMBER: _____

Sample Number	Sample Type	Sample Description	Sample Location
4426-03282001-05-001	6ft	Pillar A, Section 38 - vert.	South wall, Room 105
002	6ft	on top of blue panel - horiz.	East wall, Room 105
003	6ft	1st pillar from east end - ~~vert~~ vert.	North wall, Room 105
004	6ft	pillar next to bulletin board - ~~wall~~ vert.	west wall, Room 105
4426-03282001-05-001	6ft.	~~top of fill~~ west wall,	Room 103
002	4 ft	window sill at east end	Room 101
003	4 ft	window sill at northwest corner	Room 101
004	4 ft	window sill at ~~NO~~ west north corner	Room 101
4426-04262001-05-001	28 Ft	on top of light fixture	Room 101
-002	28 Ft	"	
-003	28 Ft	"	
-004	28 Ft	"	
-005	28 Ft.	"	

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FOOTHILLS ENVIRONMENTAL, INC.
Industrial Hygiene, Safety, & Environmental Services

2801 Youngfield St., Ste. 300
Golden, CO 80401
Phone: (303) 275-3470
Fax: (720) 489-2832

BE ~~ASBESTOS BULK~~ SAMPLING FORM

CLIENT NAME: ______ LOCATION: ______

SAMPLE DATE: ______ SAMPLED BY: ______ PROJECT NUMBER: ______

Sample Number	Sample Type	Sample Description	Sample Location
442W-03232001-05-001	6ft	Pillar A, Section 38 - vert.	South wall, Room 105
002	6ft	on top of blue panel - horz.	East wall, Room 105
003	6ft	1st pillar from east end - ~~wall~~ vert.	North wall, Room 105
004	6ft	pillar next to bulletin board - ~~wall~~ vert.	west wall, Room 105
442L-03232001-05-001	6ft.	~~top of~~ fit west wall	Room 103
002	4ft	window sill at east end	Room 101
003	4ft	window sill at northwest corner	Room 101
004	4ft	window sill at ~~no~~ west north corner	Room 101
442L-04[illegible]	78 Ft	on top of light fixture	Room [illegible]
-002	78 Ft	"	
-003	78 Ft	"	
-004	78 Ft	"	
-005	78 Ft.	"	

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Johns Manville

Johns Manville Corporation
10100 W. Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
303 978 2000

COVER PAGE

April 2, 2001

Rocky Flats Environmental Technology Site
Ms. Shelly Johnsen
P.O. Box 464, Building 881
Golden, CO 80402-0464

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

Dear Ms. Johnsen:

The Johns Manville Technical Center (JMTC) has performed the following analytical services as requested. The results are calculated based upon the information supplied on the submission form. All laboratory data has been filed and are available upon request.
The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate No. 056) and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

Scope of Work:

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0632-001.001	442L-03142001-05-001	01032806-001	NR01A001	WIPE
Beryllium	01D0632-002.001	442L-03142001-05-002	01032806-002	NR01A001	WIPE
Beryllium	01D0632-003.001	442L-03142001-05-003	01032806-003	NR01A001	WIPE
Beryllium	01D0632-004.001	442L-03142001-05-004	01032806-004	NR01A001	WIPE
Beryllium	01D0632-005.001	442L-03142001-05-005	01032806-005	NR01A001	WIPE
Beryllium	01D0632-006.001	442L-03142001-05-006	01032806-006	NR01A001	WIPE
Beryllium	01D0632-007.001	442L-03142001-05-007	01032806-007	NR01A001	WIPE
Beryllium	01D0632-008.001	442L-03142001-05-008	01032806-008	NR01A001	WIPE
Beryllium	01D0632-009.001	442L-03142001-05-009	01032806-009	NR01A001	WIPE
Beryllium	01D0632-010.001	442L-03142001-05-010	01032806-010	NR01A001	WIPE
Beryllium	01D0632-011.001	442L-03142001-05-011	01032806-011	NR01A001	WIPE
Beryllium	01D0632-012.001	442L-03142001-05-012	01032806-012	NR01A001	WIPE
Beryllium	01D0632-013.001	442L-03142001-05-013	01032806-013	NR01A001	WIPE
Beryllium	01D0632-014.001	442L-03142001-05-014	01032806-014	NR01A001	WIPE
Beryllium	01D0632-015.001	442L-03142001-05-015	01032806-015	NR01A001	WIPE
Beryllium	01D0632-016.001	442L-03142001-05-016	01032806-016	NR01A001	WIPE
Beryllium	01D0632-017.001	442W-03142001-05-001	01032806-017	NR01A001	WIPE
Beryllium	01D0632-018.001	442W-03142001-05-002	01032806-018	NR01A001	WIPE
Beryllium	01D0632-019.001	442W-03142001-05-003	01032806-019	NR01A001	WIPE
Beryllium	01D0632-020.001	442W-03142001-05-004	01032806-020	NR01A001	WIPE
Beryllium	01D0632-021.001	442W-03142001-05-005	01032806-021	NR01A001	WIPE
Beryllium	01D0632-022.001	442W-03142001-05-006	01032806-022	NR01A001	WIPE
Beryllium	01D0632-023.001	442W-03142001-05-007	01032806-023	NR01A001	WIPE
Beryllium	01D0632-024.001	442W-03142001-05-008	01032806-024	NR01A001	WIPE
Beryllium	01D0632-025.001	442W-03142001-05-009	01032806-025	NR01A001	WIPE
Beryllium	01D0632-026.001	442W-03142001-05-010	01032806-026	NR01A001	WIPE
Beryllium	01D0632-027.001	442W-03142001-05-011	01032806-027	NR01A001	WIPE

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April 2, 2001

Laboratory Report ID: 01032806
Laboratory Name: JMTC IH Analytical Laboratory
Laboratory Code: JMANS
Subcontract Number: 800188SX6
RIN: 01D0632
Requestor: Andre Gonzalez
P.O./Charge Code: EDD30120

Scope of Work: *(cont.)*

Requested Analysis	Bottle Number(s)	Customer Number(s)	Laboratory ID Number	Line Item Code	Sample Matrix
Beryllium	01D0632-028.001	442W-03142001-05-012	01032806-028	NR01A001	WIPE
Beryllium	01D0632-029.001	442W-03142001-05-013	01032806-029	NR01A001	WIPE
Beryllium	01D0632-030.001	442W-03142001-05-014	01032806-030	NR01A001	WIPE
Beryllium	01D0632-031.001	442W-03142001-05-015	01032806-031	NR01A001	WIPE
Beryllium	01D0632-032.001	442W-03142001-05-016	01032806-032	NR01A001	WIPE
Beryllium	01D0632-033.001	442W-03142001-05-017	01032806-033	NR01A001	WIPE
Beryllium	01D0632-034.001	442W-03142001-05-018	01032806-034	NR01A001	WIPE
Beryllium	01D0632-035.001	442W-03142001-05-019	01032806-035	NR01A001	WIPE
Beryllium	01D0632-036.001	442W-03142001-05-020	01032806-036	NR01A001	WIPE
Beryllium	01D0632-037.001	442W-03142001-05-021	01032806-037	NR01A001	WIPE
Beryllium	01D0632-038.001	442W-03142001-05-022	01032806-038	NR01A001	WIPE
Beryllium	01D0632-039.001	442W-03142001-05-023	01032806-039	NR01A001	WIPE
Beryllium	01D0632-040.001	442W-03142001-05-024	01032806-040	NR01A001	WIPE
Beryllium	01D0632-041.001	442W-03142001-05-025	01032806-041	NR01A001	WIPE
Beryllium	01D0632-042.001	442W-03142001-05-026	01032806-042	NR01A001	WIPE
Beryllium	01D0632-043.001	442W-03142001-05-027	01032806-043	NR01A001	WIPE
Beryllium	01D0632-044.001	442W-03142001-05-028	01032806-044	NR01A001	WIPE
Beryllium	01D0632-045.001	442W-03142001-05-029	01032806-045	NR01A001	WIPE
Beryllium	01D0632-046.001	442W-03142001-05-030	01032806-046	NR01A001	WIPE
Beryllium	01D0632-047.001	442W-03142001-05-031	01032806-047	NR01A001	WIPE
Beryllium	01D0632-048.001	442W-03142001-05-032	01032806-048	NR01A001	WIPE
Beryllium	01D0632-049.001	442W-03142001-05-033	01032806-049	NR01A001	WIPE
Beryllium	01D0632-050.001	442W-03142001-05-034	01032806-050	NR01A001	WIPE
Beryllium	01D0632-051.001	442W-03142001-05-035	01032806-051	NR01A001	WIPE
Beryllium	01D0632-052.001	442W-03142001-05-036	01032806-052	NR01A001	WIPE
Beryllium	01D0632-053.001	442W-03142001-05-037	01032806-053	NR01A001	WIPE
Beryllium	01D0632-054.001	442W-03142001-05-038	01032806-054	NR01A001	WIPE
Beryllium	01D0632-055.001	442W-03142001-05-039	01032806-055	NR01A001	WIPE

Comments: No problem were encountered with sample receiving and sample analysis

I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy sample package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Scott A. Steiner
Industrial Hygiene Project Manager

Date

Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PLAN (PACKAGE)

Group 8 CLOSURE PROJECT
(Buildings T886B and T886C)

REVISION 0

June 25, 2001

Prepared by: _____ **Date:** 6/25/01
David Babbs, Industrial Hygiene

Prepared by: _____ **Date:** 6/25/01
Kimberly Myers, Environmental Compliance

Reviewed by: _____ **Date:** 6/26/01
Steve Luker, Quality Assurance

Reviewed by: _____ **Date:** 6/26/01
Duane Parsons, Characterization Coordinator

Approved by: _____ **Date:** 6/26/01
Kent Dorr, KH Closure Project Manager

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CHEMICAL CHARACTERIZATION PLAN (PACKAGE)

BUILDING(s): Group 8 (Buildings T886B and T886C)

Notes:

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Prior to any intrusive or invasive survey or sampling activities, contact IH and Radiological Operations to determine requirements and/or restrictions during sampling activities.
10. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
11. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
T886B	10	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as sheet vinyl flooring, backing, and adhesive, acoustical ceiling tiles, and baseboards with adhesive will be sampled for asbestos.
T886C	5	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as sheet vinyl flooring, backing, and adhesive, acoustical ceiling tiles, and baseboards with adhesive will be sampled for asbestos.
Total Samples:	15	The exact sample numbers and locations cannot be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

BERYLLIUM		
Sample Location	**Number of Samples (smears)**	**Sample location and justification/rational**
T886B	5 – Biased	There is no documented supporting data or process history that proves beryllium was not used or stored in this building. Therefore, five biased samples will be obtained.
T886C	5 – Biased	There is no documented supporting data or process history that proves beryllium was not used or stored in this building. Therefore, five biased samples will be obtained.
Total Samples:	10	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
T886B and T886C	0	Lead sampling is not required in the Group 8. The only potential for a lead hazard would be in the paint. All paint will remain a part of the infrastructure during demolition and/or disposal, and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

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RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
T886B	0	Based on the Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns, no hazardous activities resulting in a release of RCRA or CERCLA constituents occurred in these buildings, therefore sampling for RCRA/CERCLA constituents is not required. Note: These buildings contain components that may need to be managed as Regulated Waste during D&D activities including mercury thermostats, fluorescent light bulbs, circuit boards, and lead acid batteries. Care will need to be taken to ensure these wastes are managed properly.
T886C	0	Based on the Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns, no hazardous activities resulting in a release of RCRA or CERCLA constituents occurred in these buildings, therefore sampling for RCRA/CERCLA constituents is not required. Note: These buildings contain components that may need to be managed as Regulated Waste during D&D activities including mercury thermostats, fluorescent light bulbs, circuit boards, and lead acid batteries. Care will need to be taken to ensure these wastes are managed properly.
Total Samples:	0	

PCBs*		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
T886B and T886C	0	These two buildings were installed in 1991. The Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns of these trailers indicate PCB contamination in the structural debris is not probable. Therefore, no sampling is required. These buildings will be disposed of as sanitary waste or sold for re-use.
Total Samples:	0	Note: These buildings do contain materials that may need to be managed as Regulated Waste during D&D activities, such as light ballasts. Care will need to be taken to ensure these wastes are managed properly.

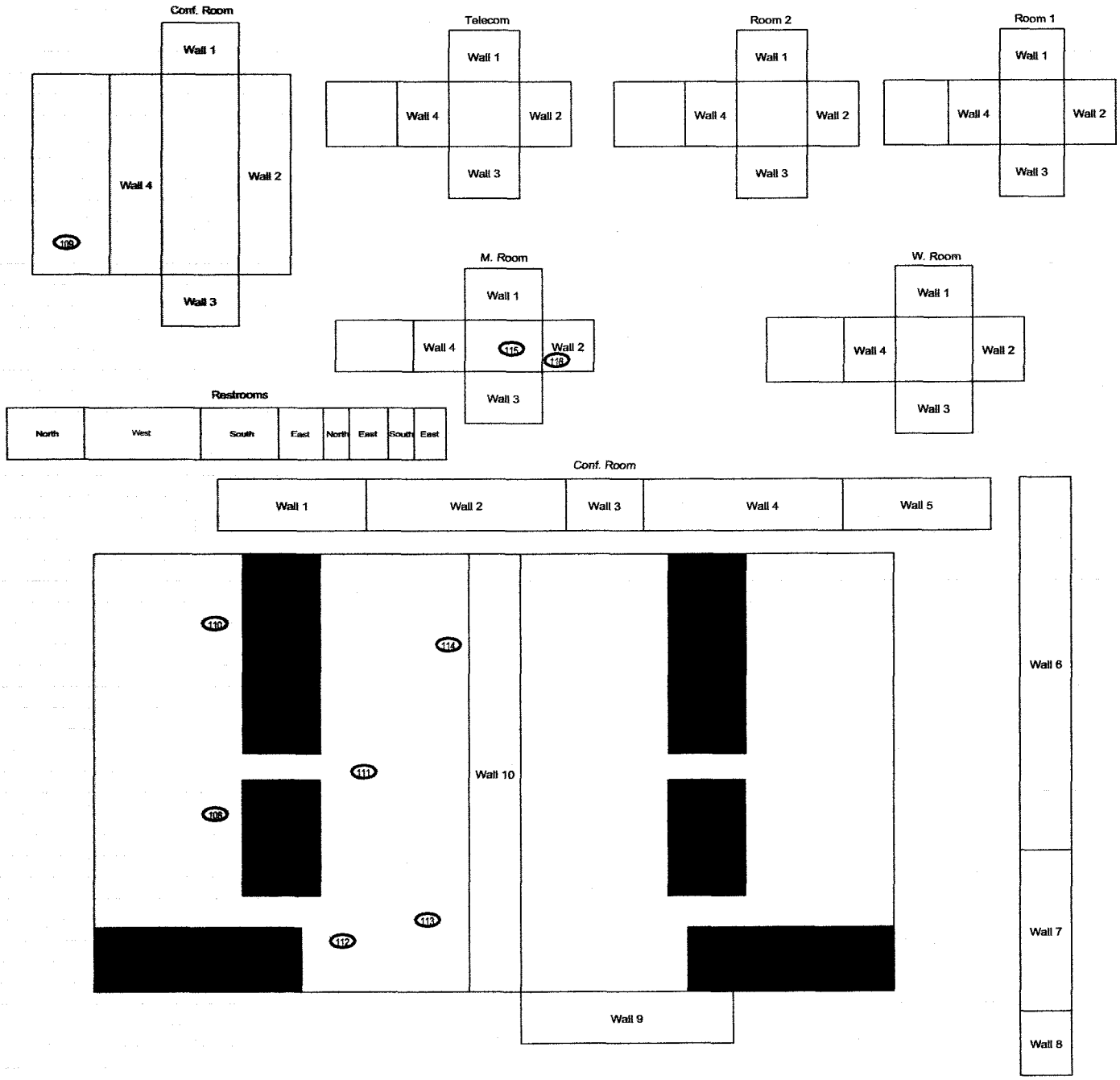
* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR8-A-001** **Classification: 3**
Building: T886B
Survey Unit Description: Interior & Exterior of T886B
Total Area: 1928 sq. m. **Total Floor Area: 366 sq. m.**

T886B Interior

000 T886B-06072001-315-108 Thru 116



SURVEY MAP LEGEND

- (#) Asbestos Sample Location
- (#) Beryllium Sample Location
- (#) Lead Sample Location
- (#) RCRA/CERCLA Sample Location
- (#) PCB Sample Location

Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0555 May 9, 2001

GR8-A-001

MF 7/30/01

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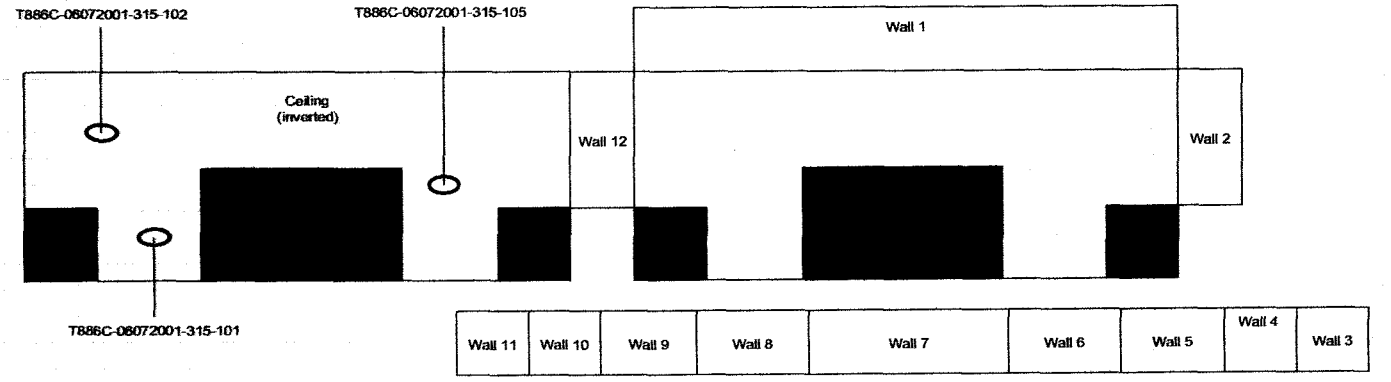
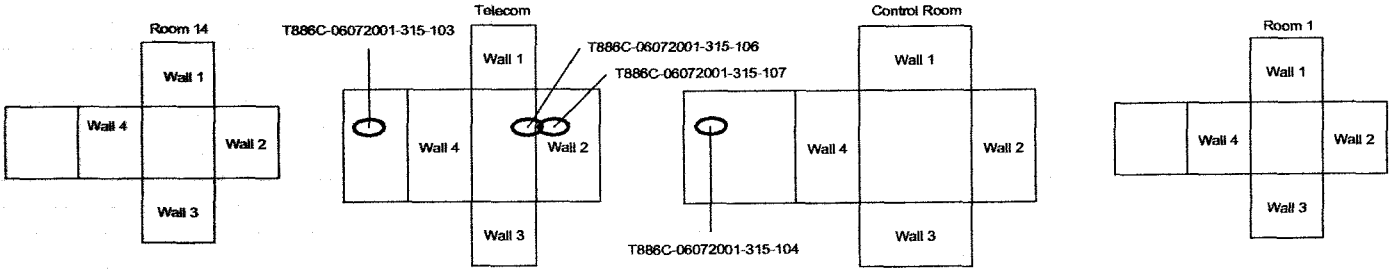
PRE-DEMOLITION SURVEY

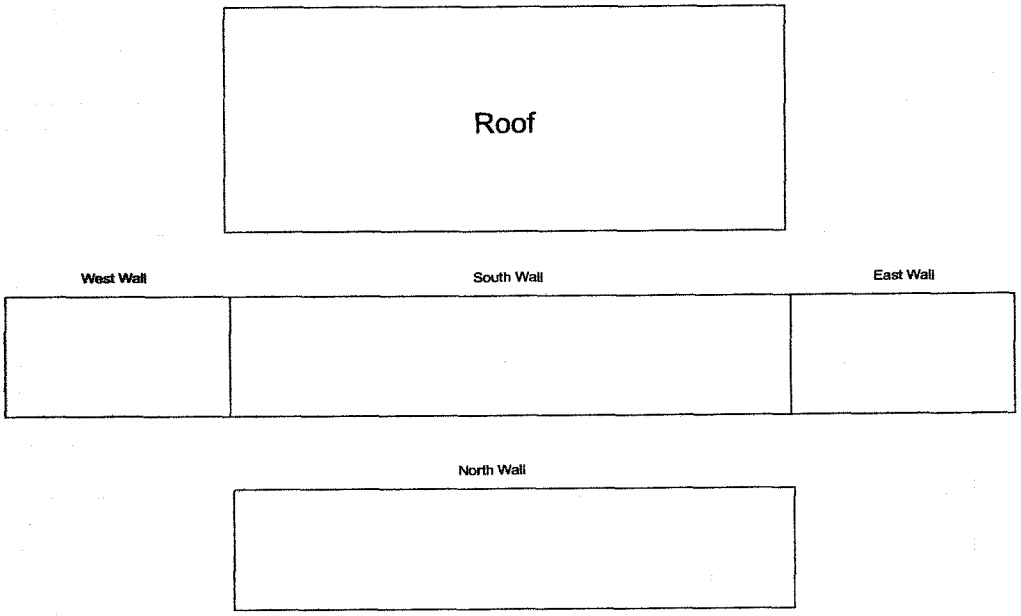
Survey Area: B **Survey Unit: GR8-B-002** **Classification: 3**
Building: T886C
Survey Unit Description: Interior & Exterior of T886C
Total Area: 1072 sq. m. **Total Floor Area: 164 sq. m.**

T886C Interior





T886C Exterior



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL

MAP ID: fv2001/01-0555 May 8, 2001

GR8-B-002

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RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896
TDH Licensed Laboratory # 30-0136

ENTERED 6/25

TABLE I. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 77917-1**
Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **61D0942/EED60122**
Client Project Description: **T886 B&C BULK ASBESTOS**
Date Samples Received: **June 12, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **3-5 Day**

Analyst: LW

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
T886C06072001315-101	EM 548552	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-102	EM 548553	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-103	EM 548554	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-104	EM 548555	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-105	EM 548556	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-106	EM 548557	A	Tan /white linoleum	100		ND	20	80
T886C06072001315-107	EM 548558	A	Yellow mastic	3		ND	0	100
		B	Tan cove base	97		ND	0	100
T886C06072001315-108	EM 548559	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-109	EM 548560	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-110	EM 548561	A	White /tan ceiling tile	100		ND	60	40

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

Data QA

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

NVLAP Accredited Laboratory # 101896
TDH Licensed Laboratory # 30-0136

TABLE I. PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 71917-1**
Client: **Kaiser-Hill Analytical Services Division**
Client Project Number / P.O.: **01D0942/RED60122**
Client Project Description: **T886 B&C BULK ASBESTOS**
Date Samples Received: **June 12, 2001**
Analysis Type: **PLM Short Report, Bulk**
Turnaround: **3-5 Day**

Analyst: LW

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibers Components (%)	Non-Fibrous Components (%)
T886C06072001315-111	EM 548562	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-112	EM 548563	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-113	EM 548564	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-114	EM 548565	A	White /tan ceiling tile	100		ND	60	40
T886C06072001315-115	EM 548566	A	Yellow mastic	3		ND	0	100
		B	Tan cove base	97		ND	0	100
T886C06072001315-116	EM 548567	A	Tan /white linoleum w/tan mastic	100		ND	15	85

ND = None Detected
TR = Trace, < 1% Visual Estimate

Trem-Act = Tremolite-Actinolite

Data QA

RFP F 3791.32 (7/95)
Formerly BF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

RIN # 01D0942

Name of Originator: David Babbs Title: IH&S Bldg/Ext: T117A/4717 Date: 6/8/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area / Bulk	REMARKS	Lab Number
T886C-06072001-315-101	Asbestos	NA	NA	NA	B		IH02B004	
T886C-06072001-315-102								
T886C-06072001-315-103								
T886C-06072001-315-104								
T886C-06072001-315-105								
T886C-06072001-315-106								
T886C-06072001-315-107								
T886B-06072001-315-108								
T886B-06072001-315-109								
T886B-06072001-315-110								
T886B-06072001-315-111							Point Count all samples from trace to ≤ 3%.	
T886B-06072001-315-112								
T886B-06072001-315-113								
T886B-06072001-315-114								
T886B-06072001-315-115								
T886B-06072001-315-116								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
David Babbs	Moore	1504 6/11/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill ☒ Verbal To: D. Babbs
RMRS ☐ Fax To: 6678
SSOC ☐ Report To: KH
DynCorp ☐ Bill To: KH
WSI ☐ P.O.#/Release: EED60122
Lab: Reservoirs

Analysis Request

Industrial Hygiene Sample
☐ Standard Service ☐ Rush ☐ Other
Asbestos Samples
☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken
Signature:
Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

Commodore Advanced Sciences, Inc. RFETS	**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**	C.O.C.# 01D0942#001
		Page 1 of 1

Sampler(s) DAVID BABBS (Signature)	Contact/Requester JOHNSEN, SHELLY	Telephone No. 6491
RIN 01D0942	Sampling Origin T886 C/ T886 B	Purchase Order/Charge Code EED60122
Project Title T886 B & C BULK ASBESTOS	Logbook No. N/A	Ice Chest No. N/A Temp.
To (Lab) Reservoirs Environmental	Method of Shipment HAND DELIVER	Bill of Lading/Air Bill No. N/A
Protocol	Related COC (if any)	PRE *SEE BELOW*

POSSIBLE SAMPLE HAZARDS/REMARKS
Are acid preserved samples DOT hazardous per 49 CFR Part 136.3 Table II? YES or (NO)
Are other known hazardous substances present? YES or (NO)
** ** **

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS Hold Time
01061E3-00116-003 & 01061E3-00116-004 POINT COUNT ALL SAMPLES FROM TRACE TO < OR = TO 1%

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative; Packing
01D0942-001.001	T886C060720013 15-101	IH	06/07/2001	7:00 AM	T886 C	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-002.001	T886C060720013 15-102	IH	06/07/2001	7:00 AM	T886 C	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-003.001	T886C060720013 15-103	IH	06/07/2001	7:00 AM	T886 C	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-004.001	T886C060720013 15-104	IH	06/07/2001	7:00 AM	T886 C	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-005.001	T886C060720013 15-105	IH	06/07/2001	7:00 AM	T886 C	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-006.001	T886C060720013 15-106	IH	06/07/2001	7:00 AM	T886 C	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-007.001	T886C060720013 15-107	IH	06/07/2001	7:00 AM	T886 C	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/14/01 1300	[signature]	6/20/01 0:55				
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION — Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process) — Disposed By — Date/Time

Commodore Advanced Sciences, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# **01D0942#001**

Page 2 of 2

RIN: 01D0942 | Contact/Requestor: JOHNSEN, SHELLY | Telephone No.: 6401

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative / Packing
01D0942-008.001	T886B060720013 15-108	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-009.001	T886B060720013 15-109	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-010.001	T886B060720013 15-110	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-011.001	T886B060720013 15-111	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-012.001	T886B060720013 15-112	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-013.001	T886B060720013 15-113	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-014.001	T886B060720013 15-114	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-015.001	T886B060720013 15-115	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None
01D0942-016.001	T886B060720013 15-116	IH	06/07/2001	7:00 AM	T886 B	1-NA / N/A /1	IH02B004 (offsiteAsbestos-bulk PLM N9002) [Routine]	N/A None

Rec 6/12/01

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/12/01	[signature]	6/12/01		12:55p		
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION — Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process) | Disposed By | Date/Time

KAISER-HILL
COMPANY
ANALYTICAL SERVICES DIVISION

FAX COVER SHEET PRELIMINARY DATA REPORTS

RIN NUMBER: 01B0942

FROM: SHELLY JOHNSEN

PHONE: (303) 966-6401

FAX: (303) 966-8345

TO: DAVID BABBS

FAX: 6678

PHONE: _____

NUMBER OF PAGES, INCLUDING COVER SHEET: _____

Please contact _____ if the fax is not received in its entirety.
(phone number)

If the accompanying data is stamped preliminary it is because the final data package has not been received and validated or verified. Until the data is validated or verified it must be considered preliminary. Final data is usually not received until 30 days after the laboratory has received the sample. Verification or validation is completed a short time following receipt of the final data package. You will be sent a copy of the verification or validation report, which you should review. If qualifiers have been attached to individual results they may affect the way that you use the data. If you have any question please contact your Analytical Services Project Lead, do not contact the laboratory directly.

☐ Property ☐ Waste ■ Sample

RELEASE EVALUATION FORM

Page 1 of 2

Release Evaluation No. 0106113-00116-004 **EXTENDED:** NO **EXPIRES:** N/A **Charge No.:** N/A

PART I **SENDER/CUSTODIAN**
ACKNOWLEDGEMENT

Description of Property/Waste/Sample To Be Released/Transferred: Nine (Qty. 9) asbestos bulk samples from T886B. Sample numbers are as follows: T886B-06072001-315-108, T886B-06072001-315-109, T886B-06072001-315-110, T886B-06072001-315-111, T886B-06072001-315-112, T886B-06072001-315-113, T886B-06072001-315-114, T886B-06072001-315-115, & T886B-06072001-315-116.

Current Location: T117A

Destination: Reservoir Environmental Services, 1827 Grant St., Denver, CO 80203

New Recipient/Custodian: Same as above

History/Process Knowledge: These samples came from an area that has no potential for radioactive contamination. The WISRIC and Historical Site Assessments for T886B were reviewed by the Characterization Radiological Engineer (Jay Britten, X3050) and determined to not be a radiological concern. The indicated facility has never been used or contained a CA/RBA. The samples are being sent for asbestos analysis.

1) By signing below, I certify information provided in Part I of this release evaluation to be true and accurate.
2) By signing below, I agree to comply with the specific requirements noted in Part II of this release evaluation.

Sender/Custodian: David Babbs Emp. No: [redacted] Date: 6/11/01 Ext: 4717

PART II **RADIOLOGICAL ENGINEERING**

SPECIFIC REQUIREMENTS AND/OR COMMENTS:

The samples specified above have been reviewed by Radiological Engineering and process knowledge indicates that there are no radiological concerns. The indicated areas have never been posted a CA/RBA. As a result, ***NO RADIOLOGICAL SURVEYS ARE REQUIRED*** *prior to transfer to the receiving laboratory.*

Custodian*: Ensure only indicated samples are delivered to the new custodian for asbestos analysis.*

Custodian: *Retain a copy of all documents required by this release evaluation. The sender/custodian will be responsible for ensuring a copy of this release evaluation is available for auditing/due diligence purposes.*

Radiological Engineer: *Process release evaluation to indicate an unrestricted free-release. Sign all appropriate documentation required for the disposition of the affected items.*

Evaluated: Jay M. Britten / Emp. No: [redacted] Date: 6/11/01 Ext: 3050
Radiological Engineer

APPROVAL FOR TRANSFER/SHIPMENT

Approved: Jay M. Britten / Emp. No: [redacted] Date: 6/11/01 Ext: 3050
Radiological Engineer

PROPERTY/WASTE RELEASE EVALUATION SIGNATURE REQUIREMENTS

Release Evaluation #: 0106113-00116-004

Release Evaluation for Waste:

A Release Evaluation for Waste requires an evaluation and unrestricted release approval signature. The evaluation signature is by the Radiological Engineer (RE) providing the methods or criteria for unrestricted release (i.e., survey requirements, analytical requirements, no survey required, etc.). The unrestricted release approval signature for a Release Evaluation for Waste shall be a RE authorized to provide unrestricted release approval. In addition, the evaluation and unrestricted release approval signatures shall not be the same RE. The intent of this provision is to provide peer review of the evaluation and method of unrestricted release. It is important the RE take the peer review process seriously and not become a "rubber stamp" for their fellow engineer.

Release Evaluation for Property:

A Release Evaluation for Property requires an evaluation and unrestricted release approval signature. For a Release Evaluation for Property, the evaluation and unrestricted release signature may be the same RE. In the past, only one signature was required for property for which a RE could provide an unrestricted release on the basis of process knowledge/history.

Release Evaluation for Samples:

Samples are any waste or material that is being shipped to an off-site facility for analysis. Samples that may be provided with an unrestricted release using process knowledge/history or standard contamination survey techniques may be authorized for shipment to an off-site facility using the signatory requirements specified for property. Samples which cannot be provided with an unrestricted release using process knowledge/history or standard contamination survey techniques shall be authorized for shipment from the Site using the methodology specified for waste, i.e., second signature being provided by a RE authorized to perform peer review and approval for shipment.

The approval for transfer/shipment section of a Sample Release Evaluation (SRE) shall be revised as noted below for samples which cannot be provide with an unrestricted release.

"The samples specified in Part 1 of this release evaluation are being provided with authorization for transport as non-radioactive materials in accordance with Department of Transportation (49 CFR) regulation. This authorization for shipment does not constitute an unrestricted release."

Additional Documentation:

Number of lines per section may be modified or additional pages attached to ensure adequate documentation of information necessary to perform release evaluation.

Additional pages or attachments to a release evaluation shall have the evaluation number, Page __ of __, initials of Radiological Engineer signing approval for transfer/shipment and date.

RFP F 010202 (02/01)
Formerly RF-3791.32

Asbestos

Field Data Sheet

RIN #

Rocky Flats Environmental Technology Site
10808 Hwy 93 Golden, CO 80403-8200
Safety and Industrial Hygiene Chain of Custody Record and Analysis Request

PRE #

Name of Originator:	Title:	Bldg/Ext:	Date:	Page of

Sample Number Bldg/Y/M/D/P#/S#	ANALYZE FOR	Volume Liters	Sample Time	MEDIA	P A B	PERSONAL AREA BULK	REMARKS	LAB NUMBER
T886C-06072001-315-101	Asb.						Drop Ceiling Tile FAX Room	
T886C-06072001-315-102							" " " NW Corner	
T886C-06072001-315-103							" " " Tele Com	
104							" " " Control Room	
105							" " " East End	
106							Sheet Vinyl Lino - Tele Com	
107							Vinyl Baseboard and Adhesive - Tele Com.	
T886B-06072001-315-~~108~~ 108							Drop Ceiling Tile	
109							" " " Conference Room	
110							" " " - Hall outside Conf. Rm	
111							" " " - Copy Rm	
112							" " " - Outside Tele Com	
113							" " " - SW corner	
114							" " " - NW Hallway	
115							Vinyl baseboard and Adhesive, Meeting Rm	
116							Sheet vinyl lino and adhesive, Meeting Rm.	

Relinquished by	Received by	Time / Date	Relinquished by	Received by	Time / Date
Relinquished by	**Received by**	**Time / Date**	**Relinquished by**	**Received by**	**Time / Date**

Report and Billing Instruction
Verbal To:
Fax To:
Report To:

Analysis Request
Industrial Hygiene Sample
Standard Service ☐ Rush ☐ Other ☐
Asbestos Samples
Other
Standard Service ☐ 24 Rush ☐ 2 Rush ☐

Seal # (Release #)
Condition of Seal
☐ Broken ☐ Unbroken
Signature:
Comments:

White - Return to Originator Yellow - Lab Copy Pink - Sample Custodian Gold - Originator

105

RFP F 010202 (02/01)
Formerly RF-3791.32

asbestos

Field Data Sheet

RIN #

Rocky Flats Environmental Technology Site
10808 Hwy 93 Golden, CO 80403-8200

Safety and Industrial Hygiene Chain of Custody Record and Analysis Request

PRE #

Name of Originator:	Title:	Bldg/Ext:	Date:	Page of

Sample Number Bldg/Y/M/D/P#/S#	ANALYZE FOR	Volume Liters	Sample Time	MEDIA	P A B	PERSONAL AREA BULK	REMARKS	LAB NUMBER
T886C-06072001-315-101	Asb.						Drop Ceiling Tile, FAX Room	
T886C-06072001-315-102							" " " , NW Corner	
T886C-06072001-315-103							" " " , Tele Com	
104							" " " , Control Room	
105							" " " , East End	
106							Sheet Vinyl Lino - Tele Com	
107							Vinyl Bulletin Board and Adhesive - Tele Com.	
T886B-06072001-315-108							Drop Ceiling Tile	
109							" " " - Conference Room	
110							" " " - Hall outside Conf. Rm.	
111							" " " - Copy Rm	
112							" " " - Outside Tele Com	
113							" " " - SW corner	
114							" " " - NW Hallway	
115				113			Vinyl bulletin board and adhesive, Main Rm	
116							Sheet vinyl lino and adhesive, Main Rm.	

Relinquished by	Received by	Time / Date	Relinquished by	Received by	Time / Date
Relinquished by	**Received by**	**Time / Date**	**Relinquished by**	**Received by**	**Time / Date**

Report and Billing Instruction
Verbal To:
Fax To:
Report To:

Analysis Request
Industrial Hygiene Sample
Standard Service ☐ Rush ☐ Other ☐
Asbestos Samples
Other
Standard Service ☐ 24 Rush ☐ 2 Rush ☐

Seal # (Release #)
Condition of Seal
☐ Broken ☐ Unbroken
Signature:
Comments:

White - Return to Originator Yellow - Lab Copy Pink - Sample Custodian Gold - Originator

1106

Walkdown

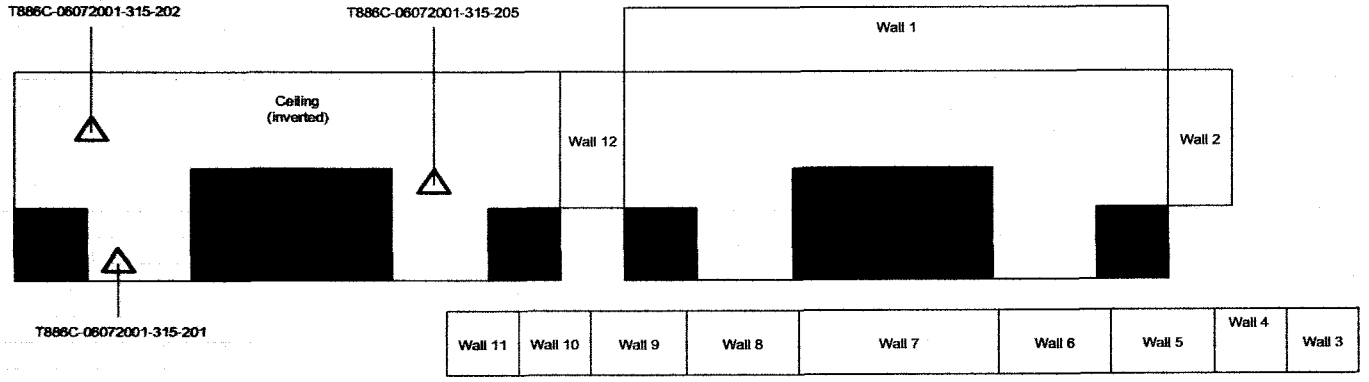
T886B
T886C } [illegible]ing tile, lino, baseboard.

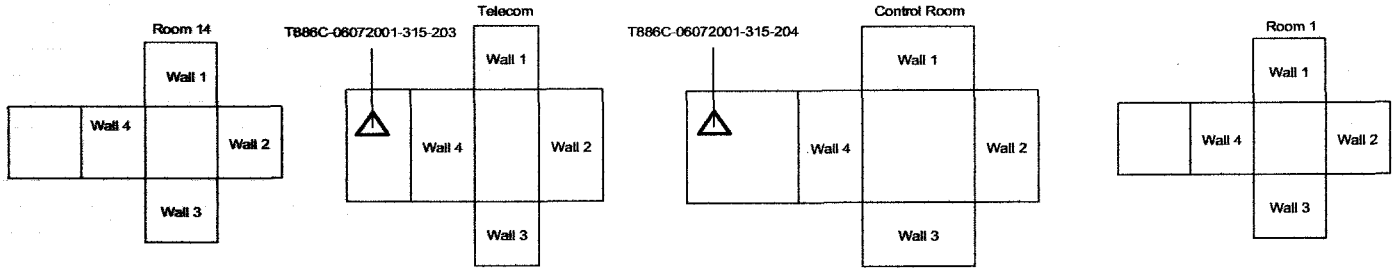
6/1 '01; 10:45 am

PRE-DEMOLITION SURVEY

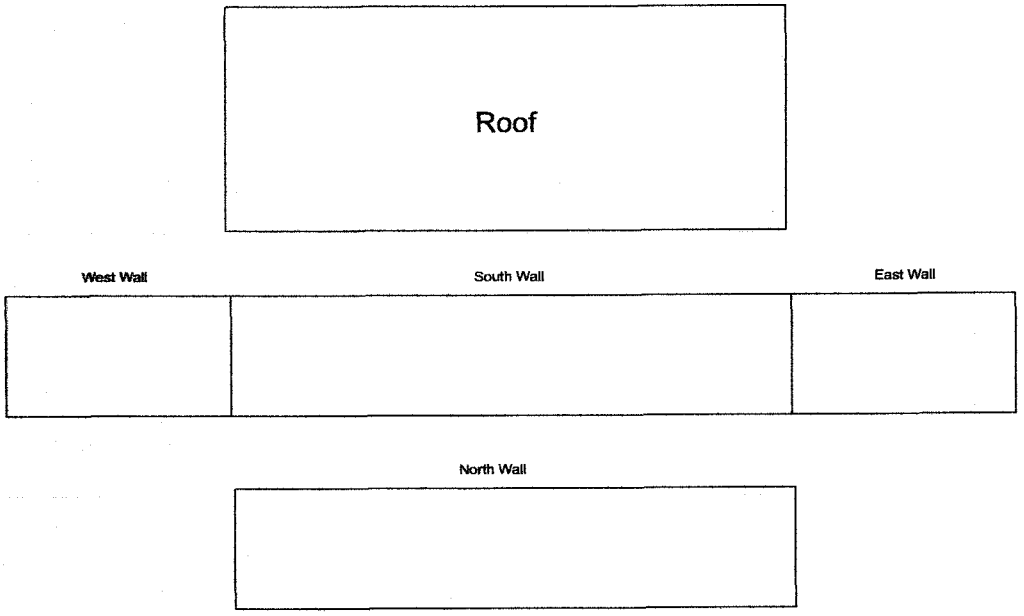
Survey Area: B **Survey Unit: GR8-B-002** **Classification: 3**
Building: T886C
Survey Unit Description: Interior & Exterior of T886C
Total Area: 1072 sq. m. **Total Floor Area: 164 sq. m.**

T886C Interior





T886C Exterior



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0555 May 9, 2001

GR8-B-002

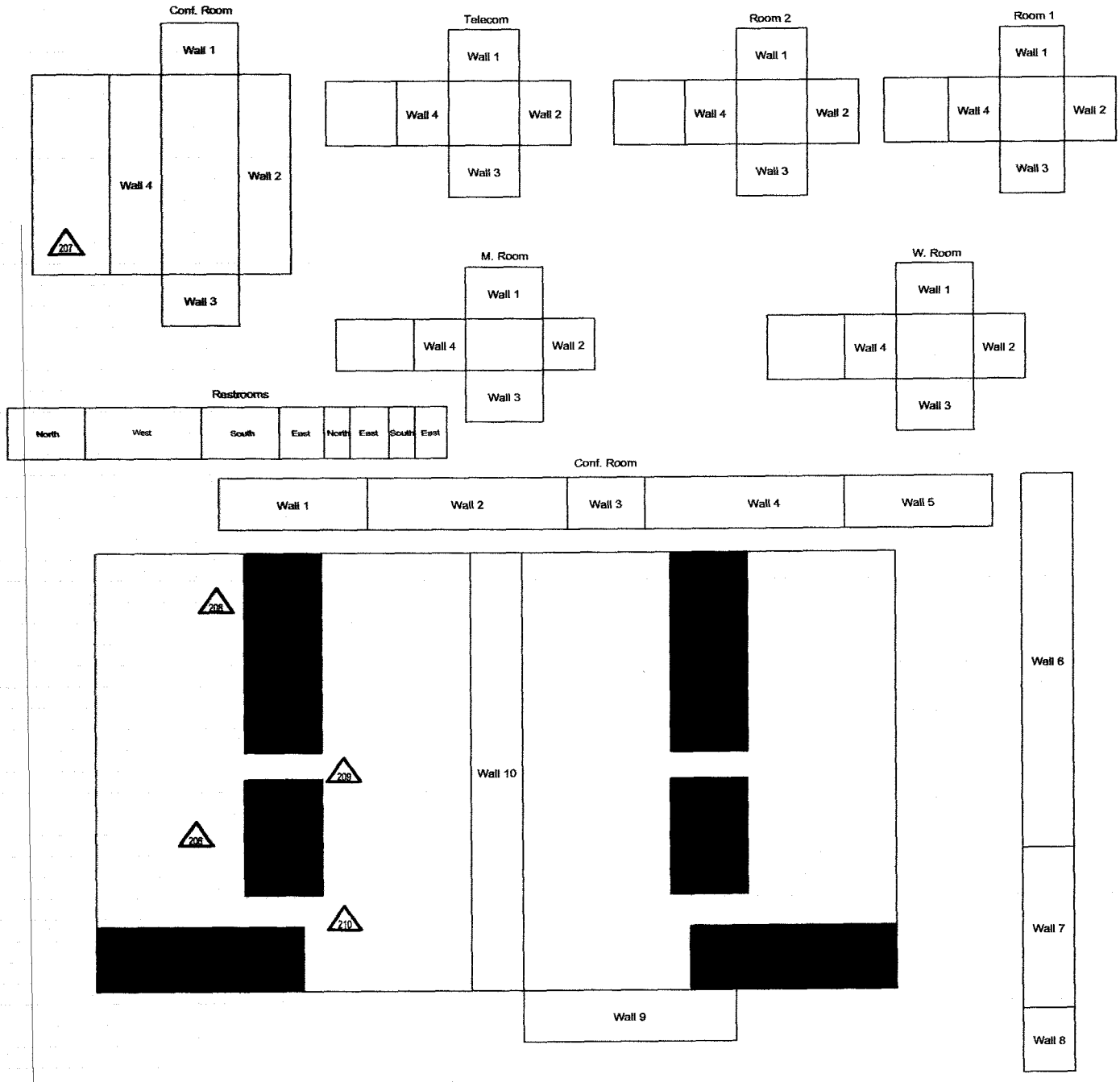
108

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR8-A-001** **Classification: 3**
Building: T886B
Survey Unit Description: Interior & Exterior of T886B
Total Area: 1928 sq. m. **Total Floor Area: 366 sq. m.**

T886B Interior

000 T886B-00072001-315-206 Thru 210



SURVEY MAP LEGEND

- (#) Asbestos Sample Location
- (#) Beryllium Sample Location
- [#] Lead Sample Location
- (#) RCRA/CERCLA Sample Location
- (#) PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7701 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

KAISER HILL

MAP ID: fy2001/01-0555 May 8, 2001

GR8-A-001

109

DOE 11/30/01

Johns Manville

Johns Manville Corporation
10100 West Ute Avenue (80127)
P.O. Box 625005
Littleton, CO 80162-5005
Tel: (303) 978-3724

COVER PAGE

June 15, 2001

Shelly Johnsen
Rocky Flats Environmental Technology Site
P.O. Box 464, Bldg. 881
Golden, CO 80402-0464

Laboratory Report ID: 01061212
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0941
Requestor: David Babbs
P.O./Charge Code: EED60122

Dear Ms. Johnsen:

The Johns Manville Industrial Hygiene Laboratory has performed the following analytical testing services as requested. The results were calculated based upon the information supplied on the submission form. All laboratory data have been filed and are available upon request. The Johns Manville Laboratory is accredited by the American Industrial Hygiene association (AIHA) in the industrial hygiene program (Certificate #056), and participates in the AIHA ELPAT program.
If you have any questions, please call (303) 978-2584.

I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the RFETS specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Sincerely,

Scott Steiner
Industrial Hygiene Project Manager
June 15, 2001

June 15, 2001

Laboratory Report ID: 01061212
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0941
Requestor: David Babbs
P.O./Charge Code: EED60122

Scope of Work:

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
01D0941-001.001	T886C06072001315-201	01061212-001	NR01A001	WIPE	QU010614-C
01D0941-002.001	T886C06072001315-202	01061212-002	NR01A001	WIPE	QU010614-C
01D0941-003.001	T886C06072001315-203	01061212-003	NR01A001	WIPE	QU010614-C
01D0941-004.001	T886C06072001315-204	01061212-004	NR01A001	WIPE	QU010614-C
01D0941-005.001	T886C06072001315-205	01061212-005	NR01A001	WIPE	QU010614-C
01D0941-006.001	T886B06072001315-206	01061212-006	NR01A001	WIPE	QU010614-C
01D0941-007.001	T886B06072001315-207	01061212-007	NR01A001	WIPE	QU010614-C
01D0941-008.001	T886B06072001315-208	01061212-008	NR01A001	WIPE	QU010614-C
01D0941-009.001	T886B06072001315-209	01061212-009	NR01A001	WIPE	QU010614-C
01D0941-010.001	T886B06072001315-210	01061212-010	NR01A001	WIPE	QU010614-C

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

01061212 Due: 6/19/01

C.O.C. # 01D0941#001

Page 1 of 2

(time/date)

Contact/Requester JOHNSEN, SHELL)	**Telephone No.** 6401
Sampling Origin T886 C/ T886 B	**Purchase Order/Charge Code** EED60122
Logbook No. N/A	**Ice Chest No.** N/A **Temp.**
Method of Shipment HAND DELIVERY	**Bill of Lading/Air Bill No.** N/A
Related COC (if any)	**PRE** 010611-00116-001

R Part 136.3 Table II? YES or NO (circled) NO (circled)

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS **Hold Time**

ROUTINE

Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
06/07/2001	7:00 AM	T886 C	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
06/07/2001	7:00 AM	T886 C	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
06/07/2001	7:00 AM	T886 C	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
06/07/2001	7:00 AM	T886 C	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
06/07/2001	7:00 AM	T886 C	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
06/07/2001	7:00 AM	T886 B	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
06/07/2001	7:00 AM	T886 B	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None

ne	Received By: R. Slat	Date/Time 6/12/01 1208	Relinquished By:	Date/Time	Received By:	Date/Time
ne	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
ne	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
ne	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

o customer, disposed of per lab procedure, used in analytical process) Disposed By Date/Time

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Commodore Advanced Sciences, Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 0106121Q	C.O.C. # 01D0941#001
		Page 2 of 2

RIN	Contact/Requestor	Telephone No.
01D0941	JOHNSEN, SHELLY	6401

Bottle No.	Customer Number	Matrix	Date	Time	Location	Container (size/type/quantity)	Sample Analysis	Preservative ; Packing
01D0941 008.001	T886B060720013 15-208	FILTER	06/07/ 2001	7:00 AM	T886 B	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0941-009.001	T886B060720013 15-209	FILTER	06/07/ 2001	7:00 AM	T886 B	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None
01D0941-010.001	T886B060720013 15-210	FILTER	06/07/ 2001	7:00 AM	T886 B	1-FILTER / N/A /1	NR01A001 (Beryllium Filter Analysis) [Routine]	N/A None

06/12/01

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Moore	6/12/01 1200		6/12/01 1208				
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

NARRATIVE

The laboratory did not encounter any problems or questions associated with the receipt of samples into the laboratory. All samples identified on the Chain-of-Custody (COC) form were received and accepted in good condition with tamper-resistant seals intact. (1.d, 4.b, 4.e)

Whatman 4 or Whatman 41 swipe samples were submitted in this project and analyzed for the identification and quantitation of beryllium in accordance with Line Item Code (LIC), NR01A001. The methodology does not define any required specific holding times for the compound on the sampling media. Results of the sample analyses were generated and reported by the specified turn-around time (TAT). (4.f, 5.6, 5.f, 6.b.7)

The laboratory preparation of samples in this project was performed following laboratory Standard Operating Procedure (SOP), IH M-1.02, Revision N. Additional references to the preparation technique of this sample type are addressed in EPA Method, 3015A and CEM Application Procedure, MS-9. The samples were prepared using the CEM Microwave Sample Preparation System, Model MDS 2000. The instrumental sample analysis for these samples follows SOP, IH M-1.04, Revision N, which covers the analytical procedure outlined in OSHA method, ID-125G. Start-up and calibration of the Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) instrument are performed following manufacturer's instructions and are addressed in SOP, IH M-1.03, Revision N. (5.a)

Results of all calibration verifications (initial and continuing), method blanks (calibration and matrix), Laboratory Control Samples (LCSs), Laboratory Control Sample Duplicates (LCDs) and internal QA/QC program monitoring standards for this analytical batch are within acceptable limits as specified in Statement of Work (SOW) modules, GR01-B.3 and NR01-A. (5.c, 5.d.2, 5.d.3, 6.b.2-6)

The internal quality control procedures for statistical monitoring of analytical data to ensure the production of quality results with continuing high validity are addressed in the JMTC IH Laboratory Quality Assurance Manual, Section 10.0. Results of all method-specific QC assessments for this analytical batch are within acceptable limits in accordance with SOW modules, GR01-B.3 and NR01-A. (5.c, 6.b.1)

The Instrument Detection Limit (IDL) has been determined to be 0.00028 µg/ml using the ICP-AES instrument, Perkin Elmer - Optima model 3000DV. Method Detection Limit (MDL) determinations are performed in accordance with the EPA Method contained in 40 CFR Part 136, Appendix B. The MDL for beryllium on the Whatman swipe matrix by ICP-AES has been determined to be 0.012 µg/swipe. These values meet the required detection limits for SOW module, NR01-A. (5.d.1) The sample batch did not require any sample re-analyses due to dilutions or any anomalies. (5.d) The qualifiers used for the results page are "U" for non-detect and "J" for levels greater than the MDL, but less than the Reporting Limit.

The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate N. 056) and continues to rate proficient within the Proficiency Analytical Testing (PAT) program. This program is designed for laboratories involved in analyzing samples taken in the workplace environment. The JMTC IH Analytical Laboratory is also accredited in the Environmental Lead Laboratory Accreditation Program (ELLAP), which is recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP). This program accredits and monitors performance of laboratories testing for lead in environmental samples such as paint, soil, dust wipes and air. (5.a)

June 15, 2001

Laboratory Report ID 01061212
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0941
Requestor: David Babbs
P.O./Charge Code: EED60122

QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION			Q	Air Vol or Time	Air Concentration
				Back Section	Front Section	Total			
T886C06072001315-201	01061212-001	Beryllium	0.1 µg			< 0.1 µg	U		
T886C06072001315-202	01061212-002	Beryllium	0.1 µg			< 0.1 µg	U		
T886C06072001315-203	01061212-003	Beryllium	0.1 µg			< 0.1 µg	U		
T886C06072001315-204	01061212-004	Beryllium	0.1 µg			< 0.1 µg	U		
T886C06072001315-205	01061212-005	Beryllium	0.1 µg			< 0.1 µg	U		
T886B06072001315-206	01061212-006	Beryllium	0.1 µg			< 0.1 µg	U		
T886B06072001315-207	01061212-007	Beryllium	0.1 µg			< 0.1 µg	U		
T886B06072001315-208	01061212-008	Beryllium	0.1 µg			< 0.1 µg	U		
T886B06072001315-209	01061212-009	Beryllium	0.1 µg			< 0.1 µg	U		
T886B06072001315-210	01061212-010	Beryllium	0.1 µg			< 0.1 µg	U		

June 15, 2001

Laboratory Report ID 01061212
Laboratory Name: Johns Manville IH Lab
Subcontract Number: KH800188
RIN: 01D0941
Requestor: David Babbs
P.O./Charge Code: EED60122

QC RESULTS SUMMARY

QC Parameter	QC Item Type	Compound	Expected Recovery	Actual Recovery	Percent Recovery	QC Sample ID	Date Analyzed	Instrument Run
Preparation Blank	PB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		6/15/01	QU010614-C
Matrix Blank	MB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		6/15/01	QU010614-C
Matrix Blank Spike	MS1	Beryllium	5.0 µg	5.24 µg	104.8		6/15/01	QU010614-C
Laboratory Control Sample	LC1	Beryllium	8.0 µg	7.91 µg	98.9	QC01061251	6/15/01	QU010614-C
Laboratory Control Duplicate	LC1a	Beryllium	8.0 µg	7.90 µg	98.8	QC01061251	6/15/01	QU010614-C
Preparation Blank	PB2	Beryllium	< 0.1 µg	<0.1 µg	N/A		6/15/01	QU010614-C
Laboratory Control Sample	LC2	Beryllium	12.0 µg	12.1 µg	100.8	QC01061252	6/15/01	QU010614-C
Laboratory Control Duplicate	LC2a	Beryllium	12.0 µg	12.1 µg	100.8	QC01061252	6/15/01	QU010614-C

RFP F 3791.32 (7/95)
Formerly RF 47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

Safety and Hygiene Chain of Custody Record and Analysis Request

RIN # 01D0942

Name of Originator: DAVID BABBS Title: IH&S Bldg/Ext: T117A/4717 Date: 6/8/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PAB	Personal Area (Bulk)	REMARKS	Lab Number
T886C-06072001-315-101	Asbestos	NA	NA	NA	B		IH02B004	
T886C-06072001-315-102								
T886C-06072001-315-103								
T886C-06072001-315-104								
T886C-06072001-315-105								
T886C-06072001-315-106								
T886C-06072001-315-107								
T886B-06072001-315-108								
T886B-06072001-315-109								
T886B-06072001-315-110								
T886B-06072001-315-111							Point Count all samples from trace to ≤3%.	
T886B-06072001-315-112								
T886B-06072001-315-113								
T886B-06072001-315-114								
T886B-06072001-315-115								
T886B-06072001-315-116								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
DAVID BABBS	Moore	1504 6/11/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

Kaiser-Hill ☒ Verbal To: D. BABBS
RMRS ☐ Fax To: 6678
SSOC ☐ Report To: KH
DynCorp ☐ Bill To: KH
WSI ☐ P.O.#/Release: EED60122
Lab: Reservoirs

Analysis Request

Industrial Hygiene Sample
☐ Standard Service ☐ Rush ☐ Other

Asbestos Samples
☒ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:
Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 010202 (02/01)
Formerly RF-3791.32

Barry Nunn

Rocky Flats Environmental Technology Site

10808 Hwy 93 Golden, CO 80403-8200

Safety and Industrial Hygiene Chain of Custody Record and Analysis Request

RIN #

PRE #

Name of Originator:	Title:	Bldg/Ext:	Date:	Page of

Sample Number Bldg/Y/M/D/P#/S#	ANALYZE FOR	Volume Liters	Sample Time	MEDIA	P A B (PERSONAL AREA BULK)	REMARKS	LAB NUMBER
T886C-06072001-315-201	Be					Horizontal surface of HVAC diffuser FAX Room	
202						" " " NW Corner	
203						" " of light fixture - Tele Com	
204						" " " - Control Rm	
205						" " - East End	
T886B-06072001-315-206						" " " light fixture	
207						" " " " " Conference Room	
208						Top of abandoned wall channel	
209						Top of fire suppression, water supply	
210						Top of light fixture, outside Tele Com	

Relinquished by	Received by	Time / Date	Relinquished by	Received by	Time / Date
Relinquished by	Received by	Time / Date	Relinquished by	Received by	Time / Date

Report and Billing Instruction

Verbal To:

Fax To:

Report To:

Analysis Request

Industrial Hygiene Sample

Standard Service ☐ Rush ☐ Other ☐

Asbestos Samples

Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal # (Release #)

Condition of Seal

☐ Broken ☐ Unbroken

Signature:

Comments:

White - Return to Originator Yellow - Lab Copy Pink - Sample Custodian Gold - Originator

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RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

RIN # 01D0941

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: David Babbs Title: IH&S Bldg/Ext: T117A/4717 Date: 6/8/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	PA (B)	Personal Area / Bulk	REMARKS	Lab Number
T886C-06072001-315-201	Be	NA	NA	NA	B		T NR01A001	
T886C-06072001-315-202								
T886C-06072001-315-203								
T886C-06072001-315-204								
T886C-06072001-315-205								
T886B-06072001-315-206								
T886B-06072001-315-207								
T886B-06072001-315-208								
T886B-06072001-315-209								
T886B-06072001-315-210								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
David Babbs	Moore	1503 6/11/01			

Report and Billing Instruction

Kaiser-Hill ☒ Verbal To: D. Babbs
RMRS ☐ Fax To: 6678
SSOC ☐ Report To: KH
DynCorp ☐ Bill To: KH
WSI ☐ P.O.#/Release: EED 60122
Lab: JMAN

Analysis Request

Industrial Hygiene Sample
☒ Standard Service ☐ Rush ☐ Other
Asbestos Samples
☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken
Signature:
Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 3791.32 (7/95)
Formerly RF-47530

Rocky Flats Environmental Technology Site

Golden, CO 80402-0464

RIN # 01D0941

Safety and Hygiene Chain of Custody Record and Analysis Request

Name of Originator: David Babbs Title: IH&S Bldg/Ext: T117A/4717 Date: 6/8/01 Page 1 of 1

SAMPLE NUMBER Bldg/Y/M/D/P#/S#	ANALYZE FOR	VOLUME liters	SAMPLE TIME/	MEDIA	P A B	Personal Area Bulk	REMARKS	Lab Number
T886C-06072001-315-201	Be	NA	NA	NA	B	T	NR01A001	
T886C-06072001-315-202								
T886C-06072001-315-203								
T886C-06072001-315-204								
T886C-06072001-315-205								
T886B-06072001-315-206								
T886B-06072001-315-207								
T886B-06072001-315-208								
T886B-06072001-315-209								
T886B-06072001-315-210								

Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
David Babbs	Moore	1503 6/11/01			
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date
Relinquished by	Received by	Time/Date	Relinquished by	Received by	Time/Date

Report and Billing Instruction

- Kaiser-Hill ☒ Verbal To: D. Babbs
- RMRS ☐ Fax To: 6678
- SSOC ☐ Report To: KH
- DynCorp ☐ Bill To: KH
- WSI ☐ P.O.#/Release: EED60122
- Lab: JMAN

Analysis Request

Industrial Hygiene Sample

☒ Standard Service ☐ Rush ☐ Other

Asbestos Samples

☐ Standard Service ☐ 24 Rush ☐ 2 Rush ☐ Other

Seal# (Release #)

Condition of Seal: ☐ Broken ☐ Unbroken

Signature:

Comments:

White - Return to Originator Yellow - Lab Copy Green - Sample Custodian Blue - Originator

RFP F 010202 (02/01)
Formerly RF-3791.32

Beryllium

Rocky Flats Environmental Technology Site
10808 Hwy 93 Golden, CO 80403-8200
Safety and Industrial Hygiene Chain of Custody Record and Analysis Request

RIN #

PRE #

Name of Originator:	Title:	Bldg/Ext:	Date:	Page of

Sample Number Bldg/Y/M/D/P#/S#	ANALYZE FOR	Volume Liters	Sample Time	MEDIA	P A B	PERSONAL AREA BULK	REMARKS	LAB NUMBER
T886C-06072001-315-201	Be						Horizontal surface of HVAC diffuser	HAX Room
202							" " of light fixture	NW Corner.
203							" " "	Tele Com
204							" " "	Control Rm.
205							" " "	East End
T886B-06072001-315-206							" " " light fixture	
207							" " " "	Conference Room
208							Top of abandoned wall chemical	
209							Top of fire suppression, water supply	
210							Top of light fixture, outside Tele Com.	

Relinquished by	Received by	Time / Date	Relinquished by	Received by	Time / Date
Relinquished by	Received by	Time / Date	Relinquished by	Received by	Time / Date

Report and Billing Instruction

Verbal To: _____
Fax To: _____
Report To: _____

Analysis Request

Industrial Hygiene Sample

Standard Service ☐ Rush ☐ Other ☐

Asbestos Samples

Other

Standard Service ☐ 24 Rush ☐ 2 Rush ☐

Seal # (Release #)

Condition of Seal

☐ Broken ☐ Unbroken

Signature: _____

Comments:

White - Return to Originator Yellow - Lab Copy Pink - Sample Custodian Gold - Originator

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☐ Property ☐ Waste ■ Sample

RELEASE EVALUATION FORM

Page 1 of 2

Release Evaluation No. 010611-00116-001 **EXTENDED:** NO **EXPIRES:** N/A **Charge No.:** N/A

PART I **SENDER/CUSTODIAN ACKNOWLEDGEMENT**

Description of Property/Waste/Sample To Be Released/Transferred: Five (Qty. 5) Beryllium characterization swipe samples obtained for Be analysis in T886C. Sample #'s are as follows: T886C-06072001-315-201, T886C-06072001-315-202, T886C-06072001-315-203, T886C-06072001-315-204, & T886C-06072001-315-205.

Current Location: Building T117A

Destination: John Mansville Technical Center, PO Box 625005, Littleton, CO 80162-5005

New Recipient/Custodian: Same as above

History/Process Knowledge: Swipe samples came from the interior surfaces of T886C. Process knowledge and site documents indicate this facility has never been posted as a CA/RBA. The facility has served as an administrative area.

1) By signing below, I certify information provided in Part I of this release evaluation to be true and accurate.
2) By signing below, I agree to comply with the specific requirements noted in Part II of this release evaluation.

Sender/Custodian: David Babbs/ [signature] Emp. No [redacted] Date: 6/4/01 Ext: 4717

PART II **RADIOLOGICAL ENGINEERING**

SPECIFIC REQUIREMENTS AND/OR COMMENTS:

The samples specified above have been reviewed by Radiological Engineering and process knowledge indicates that there are no radiological concerns. All facility documentation, including the associated WSRIC, verify no radiological concerns. As a result, ***NO RADIOLOGICAL SURVEYS ARE REQUIRED*** *prior to transfer to the receiving laboratory.*

Custodian: Ensure only indicated samples are delivered to the new custodian for beryllium analysis. Notify appropriate personnel for coordination of sample acceptance by the appropriate custodian.

This is an unrestricted release.

Evaluated: Jay M. Britten / [signature] Emp. No: [redacted] Date: 6/11/01 Ext: 3050
Radiological Engineer

APPROVAL FOR TRANSFER/SHIPMENT

Approved: Jay M. Britten / [signature] Emp. No: [redacted] Date: 6/11/01 Ext: 3050
Radiological Engineer

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PROPERTY/WASTE RELEASE EVALUATION SIGNATURE REQUIREMENTS

Release Evaluation #: 010611-00116-001

Release Evaluation for Waste:

A Release Evaluation for Waste requires an evaluation and unrestricted release approval signature. The evaluation signature is by the Radiological Engineer (RE) providing the methods or criteria for unrestricted release (i.e., survey requirements, analytical requirements, no survey required, etc.). The unrestricted release approval signature for a Release Evaluation for Waste shall be a RE authorized to provide unrestricted release approval. In addition, the evaluation and unrestricted release approval signatures shall not be the same RE. The intent of this provision is to provide peer review of the evaluation and method of unrestricted release. It is important the RE take the peer review process seriously and not become a "rubber stamp" for their fellow engineer.

Release Evaluation for Property:

A Release Evaluation for Property requires an evaluation and unrestricted release approval signature. For a Release Evaluation for Property, the evaluation and unrestricted release signature may be the same RE. In the past, only one signature was required for property for which a RE could provide an unrestricted release on the basis of process knowledge/history.

Release Evaluation for Samples:

Samples are any waste or material that is being shipped to an off-site facility for analysis. Samples that may be provided with an unrestricted release using process knowledge/history or standard contamination survey techniques may be authorized for shipment to an off-site facility using the signatory requirements specified for property. Samples which cannot be provided with an unrestricted release using process knowledge/history or standard contamination survey techniques shall be authorized for shipment from the Site using the methodology specified for waste, i.e., second signature being provided by a RE authorized to perform peer review and approval for shipment.

The approval for transfer/shipment section of a Sample Release Evaluation (SRE) shall be revised as noted below for samples which cannot be provide with an unrestricted release.

"The samples specified in Part 1 of this release evaluation are being provided with authorization for transport as non-radioactive materials in accordance with Department of Transportation (49 CFR) regulation. This authorization for shipment does not constitute an unrestricted release."

Additional Documentation:

Number of lines per section may be modified or additional pages attached to ensure adequate documentation of information necessary to perform release evaluation.

Additional pages or attachments to a release evaluation shall have the evaluation number, Page __ of __, initials of Radiological Engineer signing approval for transfer/shipment and date.

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